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INDIANA

A SOCIAL AND ECONOMIC SURVEY

BY

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With a chapter on

CHARITIES AND CORRECTIONS

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FOREWORD

Much has been written about the History of Indiana. Most folks live in the present and plan for the future. It seems well worth while, therefore, to consider for a short time the problems of today and of tomorrow. In these pages there will be found a concise description of Indiana as she is, and of the problems she faces. No effort is made to gloss over her shortcomings, no space is wasted in empty pæans. On the other hand, the good is related without exaggeration; and there is a great deal of good to be told.

An attempt has been made to have every statement of fact correct, but errors have probably escaped detection. Of such mistakes the writers desire to be informed.

In compiling data aid has been obtained from many persons, but especial thanks are due to Mr. James L. Clark of the Public Service Commission; Mr. Charles L. Henry, President of the Indianapolis and Cincinnati Traction Company; Mr. Edgar A. Perkins, of the Industrial Commission; Mr. George Schwab, Secretary of the Indiana State Federation of Labor; T. P. Littlepage, Esq., of Washington, D. C.; Mr. Floyd E. Wright, State Gas Inspector; Mr. Edward Barrett, State Geologist; Professor Stanley Coulter, of Purdue University; Professor Wm. E. Smythe, of DePauw University; Mr. John J. Walsh, Chief Inspector of Buildings and Factories; and Mr. Michael Scollard, Chief Inspector of Mines.

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CHAPTER I.

The Physical Basis

Students have long recognized that the physical features of a country powerfully affect the inhabitants, but it is only the past decade that has taught men properly to appreciate the extent of this influence. Mountain ranges and bodies of water at one time form barriers and at another time determine channels of communication; the climate, the contour and character of the soil, and the mineral subsurface combine to limit the range of industries that are profitable in any locality. These industries react upon the population, influencing social ideals, politics, learning, and even religion. Unless nature refuses to care for the improvident and also rewards forethought with liberality, accumulations of wealth are rare, leisure for thinking and the incentive to think are lacking, and culture lags. So it is important to consider the physical wealth of any locality that one desires to understand.

Altho the United States is probably more richly endowed with wealth than any other country that has come fully under the control of a people of Western European culture. Indiana does not exhibit any startlingly lavish gifts of nature. A few small diamonds have been picked up in the commonwealth, after every hard rain the children of Brown County are sent to search the streams for particles of gold, iron ore has been commercially extracted in several localities, and in Vigo County there have been obtained some valuable mineral pigments. The Hoosier state, however, offers nothing to match the gold deposits of Alaska, the diamond fields of South Africa, the nitrate beds of Chili, the iron ranges of Minnesota, or the fisheries of Washington. Indiana is lacking in the showy lavishments; yet she is possessed of abundant wealth.

The wonderful hardwood forests, that at first formed a brake upon the rapid progress of civilization and later made

Indianapolis a great lumber center, occupied a soil that has become, under proper treatment, a source of infinite riches. Since the story of the trees and of the soil is reserved for other essays, this chapter will be devoted to the wealth that has been found under the surface, or in it waiting to be appropriated by society.

Water Power.

One of the prime needs of man is some strength greater than his own. Very early in the history of Indiana, therefore, the streams of the state were dammed and grist mills were operated by the water wheels. Later, with the completion of parts of the Whitewater and the Wabash and Erie Canals, a large number of powers became available, some of which are still in use. And today at Connersville on the Whitewater, at Mishawaka and South Bend on the St. Joseph, at Goshen on the Elkhart, and at various other points along these streams and on the Pigeon, White, Blue, Mississinewa, Tippecanoe, and Eel Rivers there are factories, mills, and electric power plants dependent in whole or in large part upon the water. Altho between 1904 and 1909 the horsepower of the factories derived directly from water diminished from 9,685 to 7,892, the use of streams has probably increased, as more and more men use them for the generation of electricity. There are still some excellent dam sites, notably on the Tippecanoe, White, and Eel Rivers, which have not yet been utilized because of their inconvenient location, but the improvements in methods of transmitting electricity will doubtless permit of their development before many years have passed.

It may, at first blush, seem strange that a state having so many rivers and so many hills as Indiana, should obtain only one and three-tenths per cent of its factory power direct from water courses, but the explanation is not far to seek. In the first place, the deforestation of the hills about the headwaters of many streams has made the flow so irregular that for weeks at a time during the summer it is impossible to obtain enough head for operation. Second, the glacial deposits over a large area of the state have prevented the river beds from reaching rock bottom, and so good dam sites are rare. Third, a large amount of underground drainage deprives the rivers of a great deal of water that would otherwise be available for power. Fourth, since the rainfall is

an inconstant factor, the state average fluctuating between such wide limits as thirty and a half inches in 1901 and forty-seven and three-fourths inches in 1909, the amount of power derivable from any given source is extremely variable. Finally, in some of the localities where properly constructed dams would flood large areas and furnish a large volume of water the year around, the value of land for farming is so high that a water power development is financially unfeasible. It may be that some future age will witness the necessity of developing every possible source of water power in the state, but until that time Indiana can rely upon her abundant fuels.

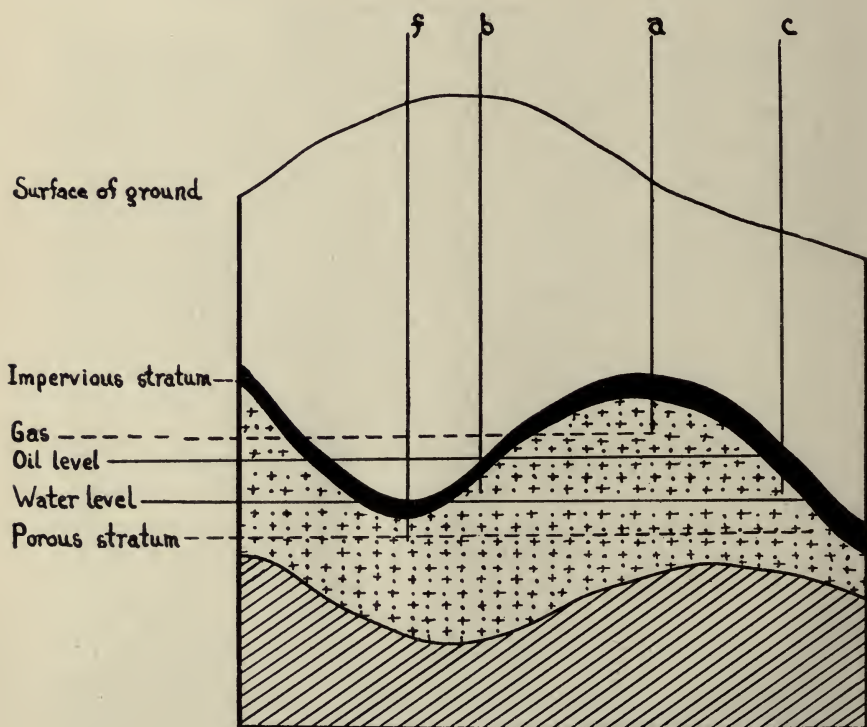
Petroleum and Natural Gas.

It is usual for men to associate natural gas and petroleum in their thinking, largely because these two fuels so often occur in the same wells, but it should be kept in mind that some borings which reach oil fail to discover gas and vice versa. Just how these substances originated scientists cannot tell, but it is possible to form some definite conclusions. In the first place, there must be a porous reservoir of limestone or sandstone. It is probable that marine plants and animals, dying in great numbers, left their decaying bodies to be enclosed in the rock that was forming, and that then an impervious covering drifted over the rock that contained the remains. In eastern Indiana this covering is the Utica Shale varying in thickness from one hundred to three hundred feet. The destructive distillation of these bodies formed oils and gases that could not escape thru the shale covering. Because the strata do not lie flat but in undulations, and because water generally gains access to each porous layer at some point where it comes near the earth's surface, the oil and gas are under pressure which forces them into the crests of the undulations or "domes". This pressure is at times so great that boring tools are blown clear out of the hole when the shale is finally pierced. The accompanying idealized diagram illustrates some cardinal principles. A well drilled at "a" would result in a flow of gas, while a bore sunk at "b" would reach oil which would probably contain salt water. The pressure of the gas in the dome or of the water back of the oil might be so great as to force the petroleum up thru the well to form a "gusher". As the quantity of oil or gas in one of these wells becomes

depleted, more filters in from the surrounding rock, and maintains the supply for an indefinite time. In order to facilitate this replenishment it is usual to "shoot" a well. When the bore has been drilled to what seems to be a paying stratum, dynamite is exploded at the bottom in order that the rock may be torn and openings established between the hole and the more remote cavities.

There is no magic in finding oil or gas. In boring it is the practice to record the depths of the porous stratum and

Relation of Strata to Product of Wells.



- a Gas well.
- b, c Oil wells, probably produce some gas.
- f Bore would strike salt water.

to compare these results with surface levels, because a well near the crest of an undulation has the best chances of striking oil or gas. As the strata frequently run parallel to each other, it is sometimes possible to make wise guesses based on the surface indications. In this way the present Gas Inspector, Mr. Floyd Wright, located the Cannelburg pool in 1914. However, the only final test of the presence of oil or gas is a bore, and hundreds of thousands of dollars have been spent in unproductive tapping of the earth's surface. "Wildcatting" or drilling in territory not known to be oil bearing is of course a large source of this loss, but, on the other hand, wells within a few yards of a paying bore may be absolute failures.

One other fact should be mentioned in this brief description of general principles. When a well such as that at "b" in the diagram is abandoned, water is allowed to leak down thru the hole. The increased pressure from this water forces the gas and oil further up into the dome, making it more and more difficult for the drillers to find a place for a successful bore, and ruining other wells with locations at "c."

Natural Gas in Indiana.

The discovery of natural gas in 1885 at Findlay and at other points in northwestern Ohio caused a furore in Indiana, for, since the Trenton limestone extends under both commonwealths, it was reasoned, if the one state possesses great reservoirs of subterranean riches, so must the other. In his report for that year, Maurice Thompson, the Indiana State Geologist, intimated that a great deal of money had been lost in sinking unsuccessful wells, and concluded that the "northern part and the southwestern part" of the commonwealth were the areas that might "be examined with much confidence, tho it is quite possible that extensive reservoirs exist in other areas of the state." Such prophecy was indefinite enough to be absolutely correct in every particular. Indeed, before this prediction was published by the state early in 1887, several postscripts had to be added. In 1886 George W. Carter, W. W. Worthington, and Robert Bell, knowing that in 1876 a company boring for coal had come upon natural gas below Eaton in Delaware county, organized a corporation which began drilling and soon struck gas at a depth of 922 feet. The roar of the escaping gas

could be heard for two miles, and the twenty foot flame could be seen from Muncie, twelve miles away. Within the year other successful wells had been completed at Kokomo, Tipton, and Portland.

The gas region rapidly extended until in 1899 there were two fields. The northern included all of Madison, Delaware, Blackford, and Grant Counties, most of Hamilton and Tipton Counties, and parts of Hancock, Henry, Howard, Jay, Huntington, Miami, Randolph, Wabash, Wayne, and Wells Counties. The southern field included parts of Decatur, Hancock, Henry, Marion, Rush, Shelby, and Wayne Counties. Since then gas has been found, often in connection with oil, at Oakland City, Princeton, Sullivan, and Shelburn, and in smaller quantity at various other places. For a while production increased rapidly: in 1886 the value of the natural gas was \$300,000, in 1888, \$1,320,000, and in 1893, \$5,718,000. Then the output fell off, only to rise in 1899 and 1900 to \$7,254,000. From that year there has been an almost steady decline until now the annual product of the gas wells is worth about a million and a half dollars.

One of the reasons for this great diminution in the amount of gas produced has been the enormous waste. It was perhaps natural for the folks who made the first finds to feel that the supply was inexhaustible, and, since they wanted to advertise their wares, they lighted the streams that shot from the bores and allowed them to burn for days and even for months. In the second place, the early rates charged consumers, based on the number of fixtures rather than on any system of exact measurement, encouraged extravagance, for by the cost of matches it was actually cheaper to leave the gas burning day and night than to turn it out and light it again. Indeed, some people would open their doors and windows to cool off the house overheated by the continually burning gas. Again, some of the gas was used for burning bricks and smelting iron, processes that can be equally well carried on with coal. Since the lighting and the heating of homes is so much more convenient with gas than with coal, society would have been better off in the long run had the use of the gas been solely domestic. Fourth, the nature of the gas supply increased the waste, for when a well fell off in productivity, the obvious course of the owner was to remove the casing and use it in another boring. Then the water would leak down this hole into the Trenton lime-

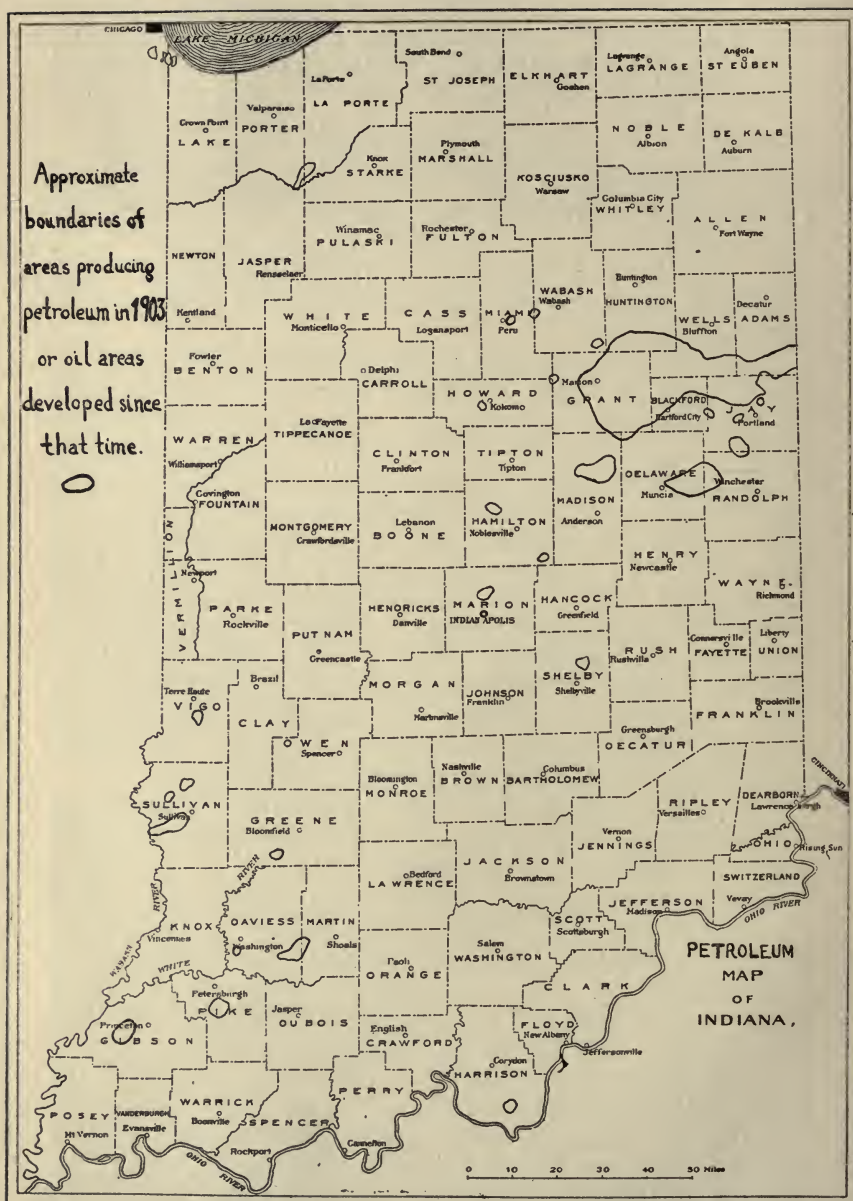
stone. Great numbers of these abandoned holes admitted such quantities of water into the oil and gas strata that the subterranean fresh water level fell over twenty feet and gas became harder and harder to find. Finally, the peculiar character of the supply of the gas compelled a too rapid exploitation. A man with a farm next to one containing a paying well could not hold back for gas prices to rise after his neighbor's well was exhausted. It was necessary for him to drill at once or the gas underlying his farm would seep thru the pores of the rock into his neighbor's well. In all these ways the gas was wasted, and the waste was encouraged by nature.

The state was not long oblivious to this waste. In 1891 the General Assembly prohibited flambeaus, and provided for a Gas Inspector whose duty it was to inspect all wells, to enforce proper precautions to insure the health and safety of the workmen and of the consumers, and to see that the pipes did not leak. The next Assembly enacted a penalty of from one thousand to ten thousand dollars for failure to stop the escape of oil or gas within two days of the completion of a successful well. It was also ordained that all abandoned wells must be properly plugged to prevent the leaking of water into the productive strata. For a while these statutes were defied. The men who sunk oil wells could not begin pumping the petroleum until the gas had escaped, and so, with justice from the standpoint of their own pocket-books, they resisted the enforcement of these acts.

In 1896, however, the State Supreme Court upheld the constitutionality of the law, and at the same time the public began to realize that the supply of gas was not unlimited. These two events made it possible to eliminate the grosser forms of wanton extravagance, and the use of the gas engine in pumping oil has led to jealous conservation in the newer petroleum fields. The new attitude came too late to conserve the major part of the great reservoirs, yet it did succeed in prolonging the life of the gas supplies.

The discovery of natural gas powerfully stimulated the industrial development of Indiana, for as the supply of this fuel in Ohio began to decline, many manufacturers looking for new locations found excellent facilities in Alexandria, Anderson, Carthage, Dunkirk, Eaton, Elwood, Fort Wayne, Greenfield, Hartford City, Huntington, Kokomo, Marion, Muncie, Noblesville, Pendleton, Peru, Spiceland, and Tipton.

Approximate
boundaries of
areas producing
petroleum in 1903
or oil areas
developed since
that time.



By 1891 some ninety-four new plants capitalized at over five and a half million dollars and employing some six thousand persons had been erected within the gas territory. Among these new factories glass works were most numerous, twenty-three establishments employing some three thousand hands. Next came the iron works, thirteen in number, furnishing occupation to eleven hundred people. The industries of lesser importance included the manufacture of strawboard, wood-pulp, brick and tile, wood products, flour, and canned fruit. So the gas period was a time of beginnings of growth in many lines of industry. When the supply of this cheap fuel began to wane, some of the plants had to be closed, but others found it possible to continue their work with the direct use of coal, or else with producer gas. The gain to the state has been permanent.

Oil.

Altho oil, like gas, had long been known to exist in the rocks lying under Indiana, it was not until 1889 that a well produced petroleum in commercial quantities. This well, the Phoenix, was a rather unusual one in that it was practically isolated in the center of Terre Haute. The next year witnessed the discovery of abundant oil at Keystone in Wells County and the real beginning of the petroleum business in the state, with a production of some sixty-three thousand barrels. Rapidly the oil area was extended in the same counties that had yielded natural gas, and by 1894 the output had reached three and a half million barrels. Two years later the product was greater by a million barrels, but after 1896 there was for the next four years a slight decline in the oil business. From 1900 the business grew until 1904 when the high water mark of 11,339,124 barrels was reached. Since then the decline has been rapid; there were pumped less than a million barrels in 1913; and about a million and a half in 1914.

When it became evident that the petroleum in the Trenton limestone would speedily fail, men began to search out other oil fields. In 1893, J. W. Swisher had succeeded in locating a producing well near Medarrysville in Jasper County, so, in 1899 a systematic exploitation of that region was begun by the Interstate Company and by an English syndicate. A heavy oil was found close to the surface but all the wells were small producers, and the field has never been

very important. Curiously enough, however, these bores tapped the same corniferous sandstones that furnished the supply of the famous Phoenix well in Terre Haute, and that were again reached by drilling near Loogootee which became a small but steady factor in the oil business by 1900. Farther south and west borings disclosed gas and oil about Princeton and Oakland City in 1903 and 1907 respectively, the successful wells having followed an accidental strike by William R. Wright in 1891 when he secured gas enough to light the County Court House at Princeton. This field has been systematically developed by the corporations. The last rich discoveries of oil have been near Sullivan and Shellsburn which first yielded their wealth in 1913 after considerable prospecting. In 1914, this field yielded 859,500 barrels from four hundred wells, while the Princeton-Oakland City field produced 151,000 barrels from about three hundred wells, and the "old field" with nearly thirty-eight hundred bores raised but 509,000 barrels. This hasty review shows that altho the great petroleum resources of Indiana seem to be pretty well exhausted, there is still productive territory, and there is always the possibility of a new find.

The desire for wealth from oil has been the cause of much loss. In Jasper County, for example, after the first fortunate strikes, companies were formed that, in their prospectuses enlarged upon their ability to sell annually more oil than the entire field would have produced in twenty years at its maximum. Many farmers "tumbled" and were "bit". In 1904, during a local furore, there were forty-seven oil companies in Muncie alone; thirty-four of them expired within a year. The exaggeration of fair prospects in glowing prospectuses was costly to many an innocent investor. Indeed, most of the profit seems to have gone to corporations of men who came from without the state to proven areas and worked them systematically with the skill of experience.

The extension of the petroleum fields into the southwest corner of the State has brought a new source of peril to the mining of coal, for the bores often pierce the coal measures. Unless such wells are properly cased while in operation and securely plugged when abandoned, gas is likely to leak into the mines and cause explosions. Moreover, unless the casing and plugging is carefully done, water may rise from lower strata, or fall down from above and cause continual trouble. Therefore, the state law requiring a certain stand-

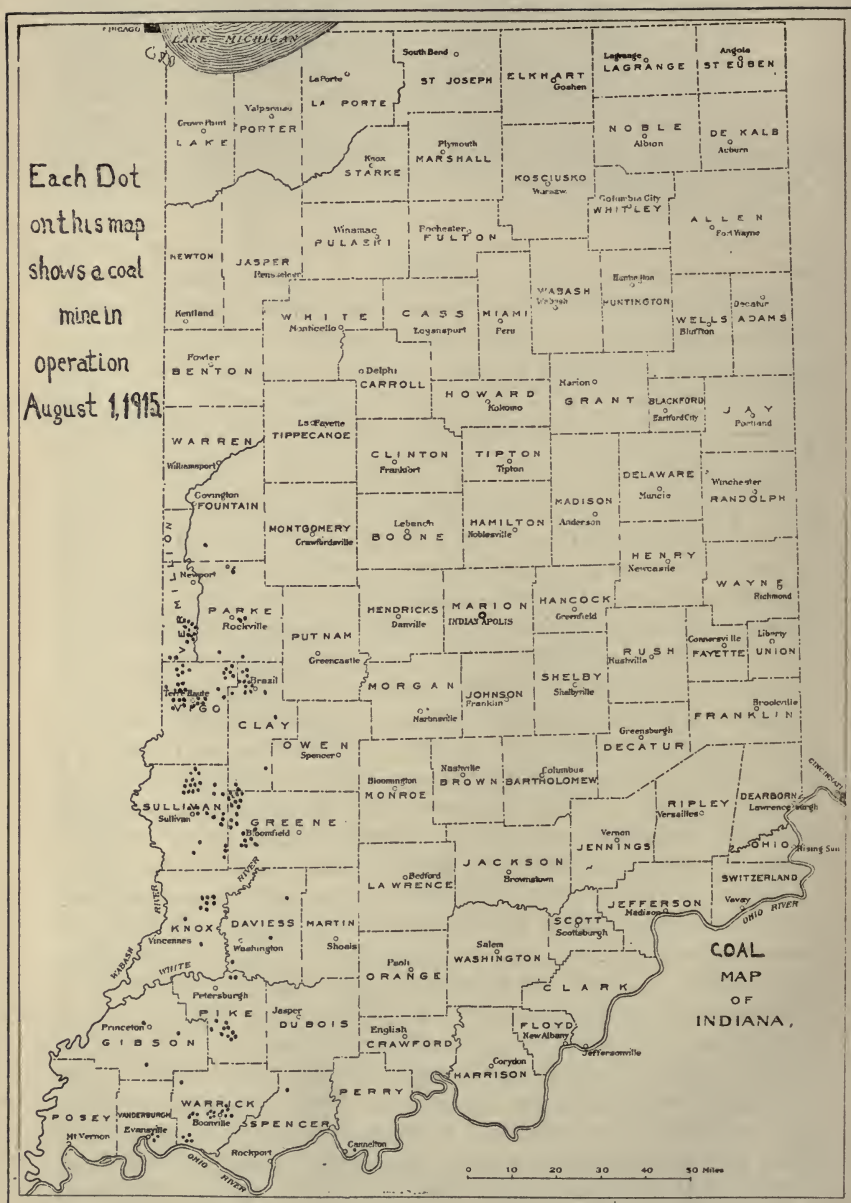
ard for plugging that is based upon the conditions of the old Trenton limestone field needs to be extended to require a new type of sealing in the other areas where the oil is in the sandstone, where the impervious covering is sometimes but two feet thick instead of two hundred, and where there are several salt water levels above the oil. Moreover, every bore in the coal belts should be recorded in order that the miners may cut around the holes by a wide enough margin to allow safety.

Coal.

The gas and the oil have already passed their period of greatest utility in Indiana, but there is another source of power, greater than both, and far more durable. Just when coal was first mined in Indiana probably cannot be told, but it is known that in 1812 some was dug in Perry County by Robert Fulton for use on the first trip of the "Orleans" down the Mississippi. In the later thirties David Dale Owen, then State Geologist, made surveys and located the coal areas of the state very much as we now know them, in the forties coal was shipped in flat boats down the Wabash, White, and Ohio Rivers, and in 1850 the first shaft was sunk near Newburg in Warrick County by John Hutchenson. The next great event in the development of the coal fields of Indiana was the opening up of the wonderful mines of Clay County, and in 1870 the state's production had risen to a half million tons. Altho for a time the extensive use of gas played havoc with the local demand for coal, the output steadily increased to over eighteen million tons in 1910, when mining occupied more than twenty-one thousand men.

The coal measures of Indiana are a part of a great bed which extends under northwestern Kentucky, central and southeastern Illinois, and southwestern Indiana. The stratum which outcrops in a line passing southward from Williamsport thru Greencastle and Paoli to a little east of Cannelton, sinks below the earth's surface at the rate of about twenty-four feet in the mile until at the Wabash River it is from seven hundred to eight hundred feet deep. Above this lowest of the coal beds sixteen others have been found by a single bore, with a total thickness of over thirty feet. There seem to be no fewer than thirty-four distinct horizons or coal levels in the state, twenty-five of which reach a

Each Dot
on this map
shows a coal
mine in
operation
August 1, 1915



thickness of at least two feet, and nine of which are workable over considerable areas.

Roughly speaking the coal area lies in four belts.—The first includes the western sections of Owen and Putnam Counties, the eastern parts of Fountain, Parke, and Greene Counties, and Martin, Dubois, Orange, Crawford, Spencer, and Perry Counties. The surface is hilly, and the quantity of coal, which is usually worked in the drift, is not large. It is of the block or semi-block type, a substance that has a tendency to cleave along charcoal planes at right angles to each other, thus forming cubes and rectangular prisms. West of this first belt is a second varying in width from ten to twenty miles and including the western parts of Fountain and Greene Counties, the central parts of Parke, Clay, and Daviess Counties, and the eastern parts of Pike and Warrick Counties. The coals in this region are likewise of the block and semi-block variety. The mines are shallow, seldom exceeding one hundred feet in depth. Many of the large mines of the state are situated in this and the third belt which stretches west from the second for from ten to twenty miles. This third belt includes parts of Vermillion, Parke, Vigo, Clay, Sullivan, Knox, Daviess, Pike, and Warrick Counties, and is characterized by the outcrops of many workable strata of the upper coals. These are extensively mined, but the lowest beds, those that outcropped in the first belt are here deep and often unprofitable. These lowest beds are deeper still, and often are pressed extremely thin in the fourth belt, which includes Gibson, Vanderburg, and Posey Counties, and the western portions of Sullivan and Knox. Altho there are no outcrops in this belt, and altho most of the mines exceed two hundred fifty feet in depth, it is really the richest coal country in the state.

In all some sixty-five hundred square miles of Indiana are underlaid with coal, and over three thousand with workable strata. It was estimated in 1908 that the original amount of coal in the measures of the state was fifty billion tons, of which three hundred fifty million had been removed or rendered useless, while fourteen billion tons that could be mined remained in the deposits. If mining continues to increase as rapidly as it did before 1908, the supply will last about one and a half centuries. It is probable, however, that men will learn to mine thinner veins, and to secure a

much larger proportion of the fuel in a seam, and that thus the life of Indiana mines will be extended.

Altho Indiana coal is not equal to Pocahontas or anthracite for steaming purposes, it is a very good fuel, testing on the average over eleven hundred thermal units to the hundred weight, which means that one pound of coal will vaporize about twelve pounds of water. It is of excellent composition for generating the producer gas that is becoming so important a factor in the steel business. For these reasons the factories of the state are finding that it pays to adapt their furnaces to the cheaper, and perhaps inferior, local fuel. Only on the eastern edge of the commonwealth can anthracite compete with the Indiana coal.

So Indiana has an abounding source of power for her industries. If the streams afford few dam sites worth developing, if the gas is nearly gone, and if the petroleum seems unreliable, the coal can keep wheels turning and machines running for a century or two. And it is to be hoped that by that time men will have tamed the sun's rays, and will have learned to carry far inland the strength of the tides.

Clays.

Many is the farm in Indiana that would be untillable because of standing water were it not for the fact that man can provide an efficient system of underground drainage. The porous tile which are laid under fields liable to be too wet, are made in great quantities from the clays that are found in eighty-two counties. This same material pressed into bricks is often utilized in constructing the farmer's dwelling. Higher grades of clay are converted into pipes for carrying off sewage, into paving material, and into the beautiful pressed bricks and terra cotta for buildings. Perhaps the finest clays in this state are those used at Brazil, at Shoals, at Huntington, and at Cannelton in the manufacture of stone and earthenware and of semi-porcelain. Indeed, "with the exception of some of the clays used in making the better grades of terra cotta, encaustic tile, and chinaware, Indiana has within her coal bearing counties the raw materials in abundance for making every kind of clay product used within her borders."

Sand and Stones.

Scarcely less valuable than the clays of Indiana are her sands. Just east of the coal fields the Mansfield sandstones outcrop in bluffs sometimes seventy-five feet thick. Other excellent sand is found along the shore of Lake Michigan, and in various parts of the state there are supplies of lesser importance. Much of this sand is close to railways, and therefore can be cheaply shipped, as, for example from the shore at Michigan City to Ball Brothers at Muncie, and from the Fern near Greencastle to the Root Glass Company of Terre Haute. The sands are all of high enough grade for utility glass, and many are good enough for window and plate glass. In spite of the failure of natural gas, the manufacture of glass has so prospered in Indiana that in 1909 the forty-four establishments employed more than ninety-five hundred persons, and produced glass worth over eleven and a half million dollars, an output which was exceeded by only two other states, Pennsylvania and Ohio.

In Orange County along French Lick Creek there is a considerable deposit of sandstone of the upper Huronian age that is splendid material for whetstones. Other sandstones found in the western half of the state are good for building purposes, particularly when fine carving has to be done.

The most beautiful building stone in the state, however, is the Oölitic limestone which lies in a strip stretching south from Greencastle to the Ohio River. In the vicinity of Bedford and Salem this stone is at its best for ready availability and for perfect texture. As it is quite soft when first quarried, it can readily be cut in beautiful patterns. Exposure to the air hardens it into a very desirable building material. This stone has been adopted for the construction of four state capitals, a third of the Indiana court houses, and some of the finest residences in New York City. The Niagara limestone as afforded by Ripley, Decatur, and Franklin Counties has been found very good for trimming, doorsteps, curbing, flagging, bridge abutments, pier footings, and street crossings. At Alexandria this stone is the basis of the manufacture of mineral wool, one of the best substances for deadening walls and floors to sound, and for insulating them for heat. These same limestones are ground for road materials, and others are used as a flux in the manufacture of glass and in the smelting of iron. In

1909 there were 3,724 men employed in quarrying \$3,616,000 worth of Indiana limestones, and the state ranked third in the Union for the value of its lime products.

Summary.

No student of Indiana can fail to be impressed with the character of the state's resources. A wonderful supply of natural gas called into being a great number of manufactures. As the gas failed, it seemed that these establishments would have to go out of existence, but easily mined coal of good steaming qualities has not only saved the day, but it has also established new industries in the commonwealth, and it promises to maintain her high position for years to come. The clays and the building stones allow Indiana to take prominent place in the production of building materials and of pottery products of all varieties, while the sands can be turned into both the cheap and the expensive grades of glass. Thus the fuel and the mineral stores of the commonwealth give substantial promise of sound industrial development.

CHAPTER II.

Trees

A person passing thru Indiana on one of the great trunk lines of railway would never suspect that "when the first white men came they found the entire state one vast primeval forest", with the exception of the swamp lands of the Kankakee region and of a comparatively small area in the northwest where the prairies have thrown a branch eastward. Yet such was the fact; not only were these forests believed to be inexhaustible, but they seemed at first a foe to the advance of civilization. To win a farm from Nature without the aid of stump-pullers or dynamite was a task for a strong man. Even up to the middle of the nineteenth century the only crop rotation extensively practiced in this commonwealth seems to have been that known as "deadening." When a farm appeared to be losing its fertility, the owner went into the neighboring forest and girdled the trees after the Indian fashion. When the trees died crops could be put in without waiting to fell them. It is wrong to say that the trees destroyed in this and other ways were wasted. The land was needed for farming, there was no use for the timber, and so it was real economy to be rid of the forest in the easiest possible way. It is unjust to blame men for failure to practice crop rotation when they had only one good commercial crop, and when new land could so easily be obtained.

Forest Destruction.

Wonderful woods these forests contained. The Indiana white oak owes its destruction to the fact that it has for a century been the "standard" by which all commercial hardwoods are measured. The black walnut abounded; some contracts for gun stocks for the armies of Europe have just caused lumbermen to scour the state in search of the last remnants. Carriage builders are eagerly seeking a sub-

stitute for the hickory which seems invaluable for shafts; the supply of the country may last ten years longer; that of Indiana is practically gone. Another tree that furnished material for the finest furniture was the wild cherry; it has almost disappeared commercially. The chestnut, the tulip, often known as yellow poplar, the maples, white pine, and many other valuable varieties flourished in Indiana. Fifty years ago, Indianapolis was the center of a wonderful forest area. Today, one comes across an occasional saw mill, but very little timber is cut in the state, and a great deal of lumber, nearly the entire consumption, is imported. Of course there are trees; of the total area of the state approximating twenty-three and a quarter million acres, the township assessors' reports for 1914 showed some 2,369,712 acres in timber on the farms. This timber is, however, almost entirely second growth and largely of undesirable varieties, and it will not be ripe for years, if it ever matures. There are large sections of the state where the woods are annually "cleaned" by fire, and there are other sections where the rate of decay seems to exceed the rate of growth. The fire kills seedlings and often injures or kills large trees; the excessive decay arises from the fact that many trees have started as sprouts from old stumps which rot, leaving their progeny an easy prey to the destructive agents. In spite of these facts, Professor Stanley Coulter, of Purdue University, believes that there is still enough wooded area in the state to maintain permanently the wood working industries and to supply the farms, if only these tracts be carefully handled.

The result of this forest destruction for farms and for lumber has been a tremendous change in the conditions of stream flow in the state. A survey of the Wabash River made in 1908 developed the fact that along the entire course there are few first class woodlots, and, indeed, so few trees that banks are ill protected from the undermining action of the water. Whereas six decades back steamboats could ascend the Wabash as far as Delphi as late in the year as April, now the river is in such shape that the Federal Government engineers recently refused to recommend any attempt to improve it. The reason for this deterioration of the Wabash as a navigable stream is very simple to the present generation. Deforestation has taken out of the soil the roots of the trees. Without the intervention of the

leaves all the rain reaches the ground, whereas a large amount would be intercepted by a forest cover. This excessive amount of rain water reaching the soil in a short time does not find a surface of decaying leaves to soak it up, and so more readily flows off. Moreover, the tree roots being gone, the soil is easily washed with the water. As the soil layer grows thinner and thinner, its absorbing power diminishes, and the rain finds its way more quickly and more completely into the stream. If the slope is gentle, some grasses may hold the soil back and prevent this rapid erosion; on the other hand, where the slope is steep, not even blue grass can stop the formation of gullies in the fields. Today, the snow probably melts more rapidly, having less shade than of old. For these reasons, the spring freshets are more violent and less lasting, since all the changes contribute to a rapid run-off of the precipitation and of the melting snows. It is by no means unusual for the river to take a great deal of soil from one farm, carry it away, and drop it on another man's field. Where there is a break in the current, the sand and gravel may be left. Thus is navigation an impossibility, because so much water comes at the freshet season and after each rain, and so little is left for the flow between times, and because these floods result in a more rapid shifting of bars. In addition, agriculture is damaged by the several forms of soil depletion described.

The situation on the Wabash has been detailed. Similar phenomena appear in many other parts of the state. Mr. Glenn Culbertson, who made a study of several counties in southern Indiana, discovered that nearly one-half of a rain now runs off in the streams, whereas in a normal country, with forested slopes, the run-off is about a sixth. He found that some of the hill farms have lost from one to three and even four feet of soil in the twenty-five years they have been cleared. Thousands of acres once deemed splendid farm land have been completely ruined. The people are leaving the hills and seeking the bottom or rolling lands for their farms, altho they used to consider the hill lands better. The uplands are being left for trees, but with a depleted soil that makes forest growth slow and precarious. Finally, he found that streams which formerly furnished good water power ten months in the year are now void of flowing water, perhaps a majority of the time. This

deterioration is not confined to the south, for an investigation of water powers made under the auspices of the Department of Geology and Natural Resources in the summers of 1909 and 1910 disclosed similar phenomena all over the state. The disastrous floods of 1913 on the Wabash, the Whitewater, and the White River, as well as on many minor streams, seem to have been in large part made possible by deforestation.

So the loss of her timber has robbed Indiana of her supply of raw materials for large wood-using industries, has ruined streams for navigation and water power, has caused flood damages, and has spoiled large areas of the rich soil with which they were originally blessed.

Forestry.

About twenty years ago this forest depletion began to impress itself upon the leaders in thot, and a desire grew to provide some way of perpetuating the timber supply. As a result the General Assembly of 1899 passed a law providing that any tract of land, not more than an eighth of a farm in extent might be counted as part of the permanent forest reserve, provided there were a minimum number of trees to the acre, not more than one-fifth of which might be cut in any one year, provided the tract was not used as pasture until the trees were at least four inches in diameter, and provided all the trees that died or were removed be replaced. All such land was to be assessed, for purposes of taxation, at the nominal value of \$1.00 per acre. The law absolutely failed to accomplish its purpose, for, altho over fifteen hundred farmers attempted to take advantage of the provisions of the statute, a very small percentage, only twenty-four persons in the first four years, were able to fulfill the conditions. Six years later the enactment was repealed.

Previous to this repeal, the State Board of Forestry was organized under authority of an act of 1901. It consists of five members appointed to represent the Hardwood Lumber Dealers' Association of Indiana, The Retail Lumber Dealers' Association of Indiana, the Faculty of Purdue University, farmers, and foresters. The Board maintains an office in Indianapolis under the supervision of a paid secretary and is required to collect and work up into available form information concerning forest preservation, timber culture, and wood uses, to recommend plans for forest preservation

and timber culture in Indiana, and to plan forest reserves, especially supervising the State Forest Reservation at Henryville in Clark County. This tract of some two thousand acres was purchased in 1903 with \$16,000 appropriated from the State for that purpose. The General Assembly at the same time set aside a dollar and a half per acre per year for management. The land was part of the grant of one hundred fifty thousand acres given by Virginia in 1784 to George Rogers Clark as a reward for his soldiers. It was composed, when purchased by the state, of seventeen farms that had been cropped without rotation, exhausted, and then abandoned. The trees had been cut off most of the area, and other parts had been burned over. The soil is mostly a fine yellow clay formed by the decomposition of a soft shale colored by iron. In places there is a rich vegetable deposit, but much of this has been destroyed by fire. Cut up by numerous ravines, some so inaccessible that the original timber has never been felled, and rising at its western end to the Knob, a full thousand feet above sea level, the tract is eminently fitted for practical forestry experiments, as it is just such land in the southern part of the state that may possibly be found available for profitable forest culture.

On this scenically superb piece of property the Board of Forestry has worked effectively. Very important from the psychological point of view is the fact that it has been improved with a substantial residence for the custodian, a well planned lawn of five acres between this house and the interurban railway, and a road running the entire three miles from the dwelling house to the summit of the Knob. This road has numerous branches that make the whole area accessible to the worker and to observers. The real work of the Board, however, has been much less showy. About eighty separate tracts have been used for experimental purposes, trees of many varieties having been set out by different methods and in different situations. Various ways of cleaning have been tried, and tree growth has been accurately measured. Studies have been made in botany and in tree enemies and diseases. The result is the accumulation of a mass of useful information that is published in the annual reports of the Board or is on file in the Indianapolis office. The Reservation was not conceived as a money-making proposition, altho the men at first in charge made the mistake of cutting some of the best timber that then

remained in order to make it appear that there was money in forestry, for the state. Rather, the purpose has been to test the theories of forestry in their application to southern Indiana, to discover what forest trees can be grown with profit, what soils they demand, what enemies they attract, and how these enemies may be overcome, what cultivation is needed, what sowing or planting method brings best results, what are the best seasons for harvesting, and how to prepare soils for planting. This is a task of years that, it is hoped, will culminate in a large state-owned nursery to insure planters the very best seedlings for their own particular use. One of the most interesting conclusions is that "yellow poplar, black walnut, and ash grow as rapidly as catalpa and black locust." It has also been demonstrated that cleaning the land of brush is valuable to the trees.

During this development of the Reservation, especially while Mr. Charles C. Deam was its paid secretary, the office of the Board has done effective work. The annual reports have been quite widely circulated, press items have been furnished, exhibits have been prepared for the state fair and for other fairs, private plantings have been visited and information has been gathered or advice given, prizes have been awarded school children for essays on forestry, and, in short, a good degree of interest in forestry has been worked up. The present need of the Board is an expert field agent who can render tree planters a consultation service at a nominal fee. Professor Coulter now receives many letters of inquiry, and is sending out an expert from the faculty of Purdue in cases where it seems that personal visit and consultation will be profitable.

The State has attempted to aid forestry in other ways. In 1913 there was passed a bill authorizing local Forestry Associations to be formed to hold forest land obtained by gift or purchase. These Associations were made legitimate objects of donations from counties, cities, and townships. They were required to cultivate the land in trees useful for lumber or for other purposes, to allow the use of the tract as a play ground whenever such use would not injure the trees, and to welcome visits of forestry classes from the schools or universities. In return for these public services, the forest reserves of these associations are tax exempt. How many of them have been organized, no one seems able to say. But it is certain that quite a number have started.

The use of such an association is twofold. In the first place, it will enable experimentation to be made in different sections of the state, and, in the second place, it will help in teaching children the values and uses of trees.

There are two other laws which are potentially useful in the development of forestry in Indiana. The first, passed in 1905, makes a person who allows a fire to spread to the woods of another, liable for full damages plus a fine of not less than five nor more than fifty dollars, and requires the road supervisor of the township to employ aid in fighting forest fires that occur in his district. The other law forbids the shipment of any nursery stock without a certificate that the trees are free from San Jose scale, and requires dealers to be licensed after an examination by the State Entomologist. This statute will primarily affect the owners of orchards, but it will also have its bearing in the future on forest plantings.

With the Indiana Forestry Association advocating plantings and with the State Board of Forestry experimenting and offering advice, there has been no great development of forestry in this state. Ten years ago or more, a great many farmers tried to raise their own fence posts, setting out black locust or catalpa speciosa; indeed, in 1902 the State Statistician reported over two hundred thousand trees as having been set out. Excellent results were expected from both species. It was thought that the catalpa would grow rapidly, making in sixteen years an excellent telegraph pole. Because of the peculiar chemical characteristics of its wood, the catalpa makes very lasting fence posts (the record is as high as eighty years service), splendid railway ties, and strong durable poles. Catalpa wood is available, moreover, for a great number of commercial uses, such as cabinet making, furniture, house trim, railway coaches, bent forms, and even for paper. The Big Four set out thirty-five acres near Brightwood, and the Vandalia planted along its tracks between Indianapolis and Richmond. Not all these plantings, however, turned out profitably. The Pennsylvania seedlings were of the *Bignonioides* variety of catalpa rather than the *Speciosa*, and grew to resemble apple trees. The planting near Brightwood did not thrive because the soil was not right. Many of the farmers found a dread enemy in the catalpa sphinx and others were given the wrong variety by ignorant or careless nurserymen. The black

locust, too, was a disappointment, for it is a frequent victim of borers. In the 1913 report of the State Board of Forestry, Professor Coulter expressed the belief that of many plantings inspected, seventy per cent were not profitable if the wood could be marketed at the best prices, and a large proportion of the others were not completely successful. On the other hand, there were men who were extremely successful, especially with the catalpa, Mr. J. E. Coen, of Montgomery County, for instance, claiming to make an annual net profit of over twenty dollars per acre.

The facts, however, do not warrant the conclusion that there is no prospect for profitable commercial forestry in Indiana. The state contains a great deal of hill land now in unprofitable farms. Many of these could be turned into forests to positive advantage. The lesson of the past, however, must be learned. First, interest must be figured on the value of the land, on the taxes paid, on the labor of planting and cleaning, and on other incidental expenses. Second, the right tree for the soil must be selected. Third, the right methods of planting and of care must be adopted. With these precautions, the experience of those who have been successful makes it very evident that there is a place for profitable forest planting. This place is not as large as some enthusiasts are inclined to believe, for so much of the land is much more valuable for farming than for timber culture, and yet it is a much larger sphere than is at present commercially realized.

There are three other commercial problems connected with the trees of Indiana. In the first place there is the little realized problem in the management of the woodlot. The woodlot is designed to furnish the timber needed for consumption on the farm as fuel, posts, poles, and other small lumber, whereas the forest planting is designed to furnish a product for the commercial market. Many a woodlot is a failure, because its owner does not realize that there is a problem of management. He may use it for pasture, and so prevent the growth of new trees, he may fail to clean it and thus prevent the maturing of seedlings or encourage the production of agents of destruction in rotting stumps, he may allow the reproduction to take place without guidance and so find himself with trees of no particular value, he may allow the growth to be too thin and so assure himself poorly formed trees, or he may have a lot of assorted ages, choice

varieties, well formed thrifty specimens, and yet not be making money because he has devoted to the woodlot too much time or too good land. However, a great number of farms in many sections of the state contain some acres that are not adapted to profitable tilling. Only such tracts can economically be devoted to the woodlot, save in exceptional circumstances. Of course there are untillable tracts that cannot be wisely used for producing wood.

Suppose the land is at hand, land that has no better function than the production of wood. Then there are a great many questions that must be answered by the farmer. In most cases he is incapable of solving these problems without assistance, for his business has never been trees—at least he has hardly regarded trees as a farm crop. The state now furnishes him with a source of reliable aid in the Board of Forestry which stands ready to advise him of the most probable adaptability of his soil, and of the varieties best suited to his purpose. This organization can, moreover, offer him expert advice on methods of planting, cultivation, and protection. Thus the way has been opened for a really scientific conduct of the woodlot that will make it a profitable part of the farm.

Nuts.

A new wood industry is now trying itself out in Indiana. Native to the state are a number of excellent nuts, the butternut, the black walnut, the hazel nut, the beech nut, the shagbark hickories, and the pecans. The trees which produce these nuts have been disappearing fast, but there still remain a large number of specimens that bear exceptional fruit. Perhaps the most promising species is the pecan. About twenty-five years ago the cultivation of this nut was begun in the southern states, and the culture is now well established in Louisiana, Mississippi, Alabama, Georgia, Florida, and Texas. The success of the southern ventures stimulated a number of Indiana men to investigate the possibilities of an extension of the commercial pecan area to their own state. M. J. Niblack, Thomas P. Littlepage, R. L. McCoy, J. F. Wilkinson, and Professor C. G. Woodbury of Purdue have devoted large amounts of time to seeking out good trees from which to graft or bud others. They have found that the seedlings do not come true to the type of the parent, and that every specimen has its individuality.

However, they have succeeded in locating about a dozen trees ranging from the "Hodge," situated in Illinois a few miles southwest of Terre Haute, to the "Major" and the "Hinton," across the river from Evansville. Some of these trees furnish nuts as large as the best from the south; all give nuts that crack easily, afford excellent meats, and attain fair size; all are regular bearers of large crops. From these parent trees a large number of seedlings have been grafted and several orchards set out. These grafted stocks stand transplanting well, and bear within a few years. Altho they seem to do best in rich bottom lands, alluvial soil, or cut-over pine tracts, the range seems to be pretty wide in Indiana south of the latitude of Terre Haute, but a graft will not do well much north of the parent tree.

Mr. Littlepage and others of the exponents of pecan raising in Indiana maintain that there is little danger of overproduction because the large supply, while lowering the market price, will, nevertheless, create a larger market. The pecan is one of the finest nuts that the world produces, and there is no reason why its use should not be greatly expanded. Of course there are years of poor crops, yet the bearing of well chosen pecan trees is more certain than that of apple or peach trees. Just what is the future of pecan raising in Indiana none can tell, yet the men who have been experimenting are sanguine that the state furnishes both the proper soils and the choice varieties, and that wisely expended efforts will be rewarded with large financial success.

There are two other nuts which seem to promise profitable culture in Indiana, the shagbark hickory and the black walnut. Both are delicious nuts of high commercial value, both have been tried out in this climate with some degree of success. They do not mature as quickly as the pecans but they are, at least, to be considered possible additions to the list of the products of the state.

Certainly one suggestion is worth while. A great many trees are planted for the purpose of giving shade both in yards and along the highways. Some of the nut trees, particularly the pecans, are not only splendid shade trees, but give an additional satisfaction in their toothsome product.

Orchards.

The third of the additional problems connected with the trees of Indiana in their commercial aspects is that of

the orchards. Indiana is not one of the leading states in the production of apples for sale. Probably the chief reason for this is the fact that much of her land is so admirably adapted to the raising of grain that the fruits have been regarded as mere conveniences; it has been felt that every farm should have its orchard, generally a small one. Moreover, the ordinary farm crops are produced with less hazard and yield a larger return on the investment for the short run—it takes more capital to start an orchard than to finance a single ordinary crop. Nevertheless in 1910 Indiana produced more apples than did Oregon by half a million bushels. The difference, however, was more than counterbalanced by the fact that very few of the Indiana apples reach the market, less than three hundred thousand bushels having been sold from the farms in 1913. There are reasons for believing that Indiana can become one of the leading apple states in the country, if her resources are properly utilized. In the first place, her apples possess a flavor which is generally considered far superior to that obtained in Oregon, a taste that is excelled by the product of few states if any. In the second place, not only does Indianapolis furnish a market that consumes more apples than Indiana has ever been able to supply, but the transportation facilities all over the commonwealth are so good, and the proximity to the largest Eastern cities is such that freight costs should be low to the Indiana grower. Third, the state contains much hilly land that is not well adapted to farming purposes, but which, selling as it does for from twenty-five to a hundred dollars an acre, can be set out to apples with good prospects of realizing attractive profits. Fourth, the expense of production should be normally less in Indiana than in Oregon, for the cost both of living and of wages is lower in the eastern state. Finally, the demand for apples is so large that there is small danger of overproduction. Indiana has one great disadvantage to overcome, however, in the start of the western states which have well organized coöperative marketing associations and an established reputation in the great selling centers. This start can be overcome only with hard labor and good head work. In the first place, it is necessary to do what a few men in the state have already done with profit, to make apple growing a primary business, to study it thoroly with a view to having only thrifty trees of good bearing quality, producing excellent apples.

Second, these trees must be intelligently cared for, they must be properly set out, pruned and sprayed, and the apples must be thinned. Third, products of the orchard cannot be sold at good prices unless they are tastefully and honestly packed—packed so that the contents of every box are uniform and true to the sample. Fourth, the transportation must be carefully watched to see that the routing is such as to bring the fruit most promptly to the market, and to be sure that the correct refrigeration is afforded. Much good fruit is greatly damaged in transit. Finally, markets must be intelligently studied in order that the best prices be obtained. It seems as if fruit growing cannot be made profitable by a large number of men without coöperative marketing organizations. The citrus fruit growers of California, and the apple growers of Oregon and of Nova Scotia found that as long as they competed among themselves they were victims of a system that required sales thru commission men, or speculators. With organized coöperative selling associations, they were able to employ the best market experts to secure for them top prices in the available markets; they were able effectively to approach the railways, sometimes thru the Interstate Commerce Commission, and to secure proper shipping facilities; they were able to standardize their product, packing identically in a common warehouse, and adopting brands that have won recognition for honesty and quality; they have been able to club their experience and to command the best wisdom of experts as to the management of their orchards. It is hard for one individual to establish his brand, especially in view of the fact that the best market for him varies annually and during the seasons. In this respect alone the coöperative principle more than justifies its existence. Coöperation has, as yet, failed to spread very widely in Indiana, but, as close as Michigan it is successfully coping with the problem of selling grapes, and in Ohio two such associations are satisfactorily handling apples. Of course a number of individuals, probably a large number, can succeed in establishing good markets. But it seems reasonable that real success in the orchard business cannot be realized in Indiana until the farmers discover the value of coöperation and learn how to coöperate as have other farmers.

Of late considerable progress has been made in developing the apple possibilities of the state. The Indiana

Horticultural Society has been agitating the matter and disseminating information in its conferences, and the Indiana Apple Show has become one of the big events of the year. The effects of this show are varied, but it may be well to note that it has greatly improved the quality of fruit by raising the standards of the growers. By the third year it was said by Professor Woodbury of Purdue that the knowledge of the farmers had increased from two to three hundred per cent. Apples that would have won prizes in the first show were refused admittance to the third. Moreover, the show has given an opportunity to preach right methods of care for the orchards, by spraying and pruning. And, finally, the show has served to advertise the excellence of the Indiana apples, and to increase the demand for them, both within and without the state. Another agency that has been working for the betterment of orcharding in the state is the system of County Agents who have held a great many pruning demonstrations and who are constantly dinning into the minds of farmers the necessity of spraying their trees in order to keep the fruit absolutely sound. Demonstrations of the value of spraying are causing many orchard owners to avail themselves of this new and powerful tool against nature. In 1915 the General Assembly passed a law which has in it great possibilities. Ten or more persons owning contiguous lands on which are situated orchards or other fruits may form voluntary associations establishing quarantine districts which may not be over twenty square miles in area and which shall be coterminous with the lands of the members. These Horticultural Associations are to be financed by assessments upon the members, and are to coöperate with the state entomologist and the county agents in extirpating or limiting the spread of insects and plant diseases. They may hire experts to give advice and active service, and they may buy machines and wagons necessary for spraying. Thus it will be possible to realize some degree of coöperation in caring for orchards, and each will be protected additionally by the fact that a wide area will be cared for. An enterprising man need not be surrounded by infected orchards. Moreover, the coöperation should make spraying cheaper.

It would seem that there are large possibilities for the upbuilding of a profitable apple raising industry in Indiana, possibilities that are beginning to promise actual realization.

But in order that the orchards may attain the development they deserve men must make apple growing their prime business, and probably they must learn to coöperate.

Summary.

Indiana's trees, then, present a complicated problem. The solution may be summarized as follows: A great deal of the land in the state either is unfit for ordinary field crops, or, being on hill sides cannot be used for field crops without excessive erosion and rapid deterioration. A large proportion of these lands can be profitably devoted to trees. On many farms there is an opportunity for a woodlot that will be worth while by saving expenses for fuel and posts; and other tracts can well be devoted to raising apples. There seems to be an increasing certainty that profitable investments may be made in pecans in the suitable lands found south of the latitude of Terre Haute. Finally, there are still other lands which can be used for actual silviculture, or the raising of lumber. All these possibilities can now be realized because there has already been obtained a mass of information available to any one who desires to invest in trees.

* Note. The problems of floods resulting from deforestation have not been solved. The 1915 General Assembly passed so-called flood laws. These, however, fail to reach the fundamental problem, but are designed to provide for the safe carriage of flood waters past cities.

CHAPTER III.

Agriculture


The great bases of Indiana's wealth are her soil and her climate. Along the courses of the Ohio, the Wabash, and the White Rivers are deposits of sediment brought down by the spring floods of centuries to furnish the nutrition to abundant crops. The secret of the fertility of the bottom lands is the variety of their composition, for the waters bear bits of eroded minerals from all parts of the upper drainage basins and set them down in combinations rich in the requisites of plant life. Back from the rivers, the area south of the extreme glacial boundary, which is shown on the Oats Map, is covered with residual soils, that were formed by the disintegration of the underlying rocks, shales, sandstones, and limestones. As the country is quite hilly and as the soils are not deep, the rains have washed away a great proportion of the fertility of many cleared fields. This, coupled with the fact that there are too few constituents in the soil, makes the land poor for farming, a fact that is strikingly illustrated by the maps in this chapter. The hills, however, are being used for orchards; and berries, cattle, and sheep are successfully raised.

North of the Southern Glacial Boundary is the region of drift soils. Here the original rocks have been covered with mineral particles brought by the great ice sheets from Labrador, Wisconsin, and other regions. Particularly in the area of the *Wisconsin drift have the oldest strata been deeply buried, for the average thickness of this deposit is little short of a hundred fifty feet, and the depth ranges from forty to five hundred feet. The surface, which varies in character from the sands of the beaches of the prehistoric Lake Chicago to the loams rich in organic matter of the Kankakee marshes, is adapted to the support of many

*Also shown on the Oats Map.



Southern limit
of
Wisconsin
Drift.



OATS
MAP
OF
INDIANA,
Southern Glacial Boundary

crops. Sands, clays, peats, loams, and mucks predominate in considerable tracts, but there are farms which include a variety of soils.

The richness of the land is made available by the climate of the state. While in all parts of the commonwealth the summer temperatures usually reach ninety-five degrees Fahrenheit, the hot periods are seldom prolonged and are relieved by times of moderate temperatures. The last killing frost of the spring averages about April seventh at Evansville, April fourteenth in the southern third of the state, and May fifth in the northern parts. The mean date of the occurrence of the first killing frost varies from October sixth to October twenty-seventh as one passes southward. Thus, the typical growing season ranges from approximately one hundred fifty days near the Michigan line to two hundred days at the junction of the Wabash and Ohio Rivers. Moreover, the rainfall which is fairly evenly distributed over all seasons of the year is usually ample, increasing from an average of thirty-six inches in the north to more than forty inches along the Ohio River. Since much of the land is rolling, the state is naturally well drained. Finally, many wet fields can be greatly improved by tiling, and even the marshes of the Kankakee, which once were found so impassible that the existence of the river had to be taken on faith, are now in process of reclamation. Indeed, the possibilities of tile pipe and of drastic drainage laws have been quite fully realized to the great good of Indiana farming.

It appears that Nature has given Indiana a source of vast wealth in her soil and in the climate that enables this soil to be productive.

Extent of Farming in Indiana.

The Hoosiers have not been unmindful of Nature's richest gift, for they have managed to include in their farms over nine-tenths of the area of the commonwealth. Indeed, in 1910 the 16,931,252 acres of improved agricultural land included 73.4 per cent of the surface of the state. Only in Iowa, Illinois, and Ohio, has a larger proportion of the land been brought under cultivation, and thruout the nation but one-fourth of the surface had been improved at the time of the last Census. So, altho the average size of farms in Indiana, 98.8 acres, was nearly a third less than that of the farms of the whole nation, the mean farm in the state, hav-

ing 78.6 acres of improved land, had then more acres under cultivation than the average farm of the nation. The typical Hoosier farm is between forty-nine and one hundred acres in extent, nearly one-third being in this class; another quarter of the farms are one hundred acres, but less than one hundred seventy-five. In the United States as a whole the proportion of farms smaller than fifty acres is one-third, in Indiana, one-ninth, and the per cent of farms containing over one hundred seventy-four acres is 18.2 for the nation, and but 12.6 per cent for the commonwealth. The great significance of these data is, first, that neither poverty like that of the freedmen of the south, nor poverty like that of the aliens in New England has compelled the resort to small farms or to intensive cultivation, and second that, happily for Indiana, no very marked trend toward large scale agriculture has seriously lessened the potential number of land owners.

The value of all farm property in Indiana increased eighty-five per cent in the ten years ending 1910 to a total little short of two billion dollars (\$1,809,000,000), of which the land represented nearly three-fourths and the buildings over a seventh, the implements about one-fortieth, and the domestic animals nearly one-tenth. This means that the average farmer in the commonwealth has land and buildings worth \$7,399, stock worth \$807, and implements and machinery worth \$190, or an investment equivalent to eighty-four hundred dollars. This is an enormous increase over forty-four hundred dollars, the mean value of an agricultural plant in 1900.

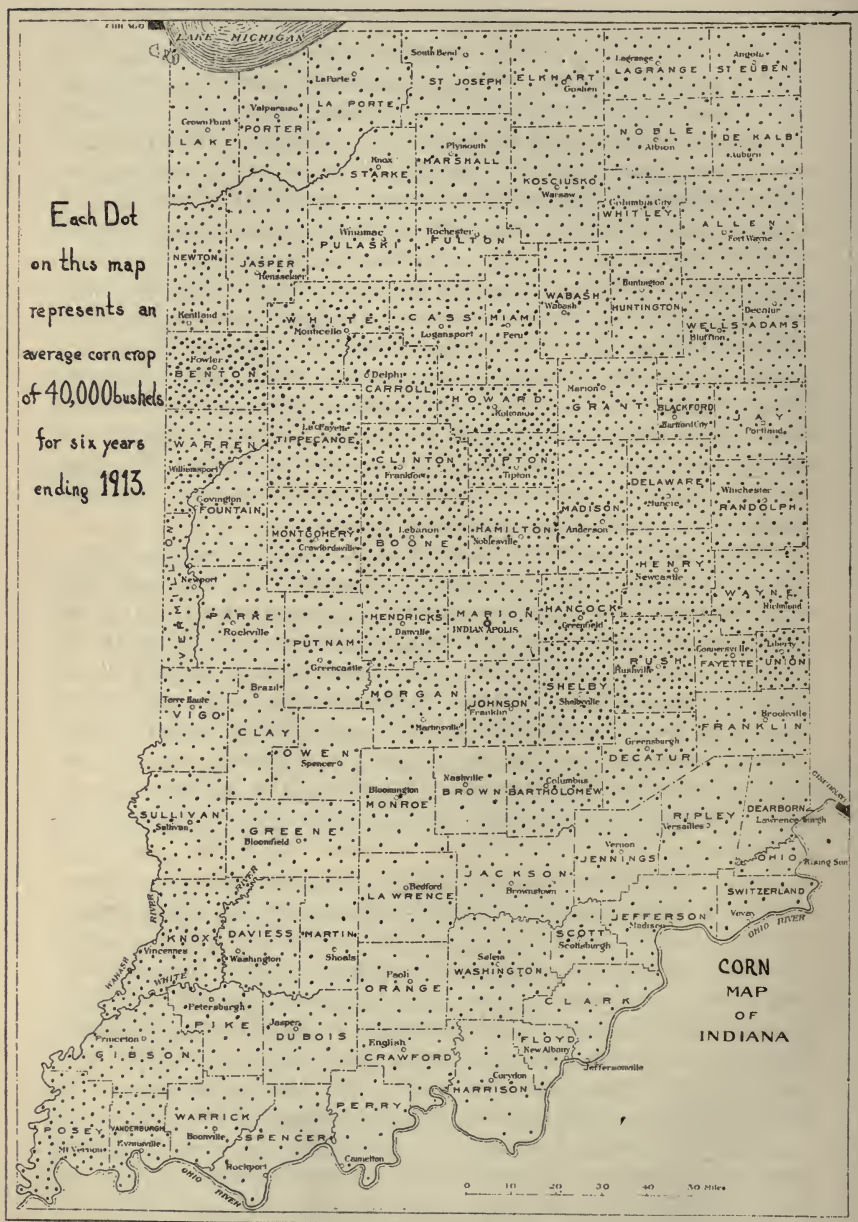
Perhaps the increase in the amount of capital needed for the purchase of a properly equipped farm is one of the great causes of the growth of tenancy. In 1910 exactly thirty per cent of the Indiana farms were operated by tenants, as compared with twenty-eight and six-tenths per cent in 1900 and twenty-three and seven-tenths per cent in 1880. Altho, in this respect, Indiana is more prosperous than the nation as a whole, thirty-seven per cent of the farms in the United States being tilled by tenants, she is yet considerably less fortunate than the group of the East North Central states in which but twenty-seven per cent of the farms are thus operated. Rising values are, moreover, at least partly responsible for a six per cent increase in the proportion of farms operated by the owners but mortgaged. There is no

doubt but that the mortgage is frequently a means of obtaining a farm, but when for decades both the number of tenants and the number of mortgages are growing, it is the inevitable conclusion that it is becoming ever more difficult to achieve unincumbered ownership. Altho this tendency is by no means confined to Indiana, it is none the less deplorable, for tenant cultivation is rarely as efficient as that by owners, and renters are apt to be less desirable citizens than freeholders because their interests are not permanently bound up in those of the community. Moreover, the man who is paying interest or rent, in whatever form, has a smaller income than if he could pocket the whole of the net return of the farm. The increase of tenancy and of mortgages, then, means that an increasing proportion of the earnings of the farms is going, not to the operators, but to landlords and to capitalists. The evil lies not in the fact that the capitalist enjoys an income, but in the fact that the operator has his return reduced.

The importance of farming in Indiana is further indicated by the number of people it supports. At the last census, 1,143,835 individuals lived in incorporated places of at least twenty-five hundred inhabitants, and 1,557,041 in smaller communities. Of these rural folk 1,257,584 lived altogether outside the limits of cities and towns. As many who dwell in the smaller towns manage farms in the neighborhood, and as few persons outside of towns are not dependent on agriculture for their livelihood, it is safe to conclude that about half of the Hoosiers are directly interested in farming.

The farm population of Indiana is remarkably homogeneous. In 1910 over nineteen-twentieths of the farm operators were white and of native birth, one in two hundred fifty was colored, and less than one in twenty was white of foreign birth. Of the foreign born farmers nearly two-thirds were German and one-eighth British or Irish. In the United States as a whole one farmer in seven is a negro, and one in ten is a foreign born white. No other northern state has so large a proportion of native born among its white farmers, and the high percentages of natives in the southern commonwealth are accompanied by considerable numbers of negro farmers. It is, therefore, safe to maintain that Indiana has the most homogeneous agricultural population of all the states. This racial unity should make coöperation

Each Dot
on this map
represents an
average corn crop
of 40,000 bushels
for six years
ending 1913.



more easy, and should greatly facilitate the work of agencies striving to better agricultural methods.

Crops.

Indiana early showed a wonderful capacity for producing the cereals. In 1860 the Hoosiers raised more wheat than the people of any other state save only Illinois, and more corn than the farmers of any commonwealths except Illinois, Ohio, and Missouri. At the beginning of this century, however, Indiana ranked seventh in the production of wheat and sixth in corn. During the next decade Indiana fell back to eighth place among the states in wheat raising, but rose to third in corn with a yield of 195,496,000 bushels. The average crop for the six years ending 1913 included about twenty-nine and a half million bushels of wheat and one hundred fifty-seven million bushels of corn. During the last thirty years, the relative importance of wheat among the cereals has steadily declined, for in 1879 three-eighths of all the area used for grains was sowed in wheat, and in 1913 but 21.4 per cent. The proportion used for corn has remained about constant, but that devoted to oats has increased from less than one-eleventh to 21.2 per cent. In 1899, 90.9 per cent of the farms raised corn, 59.4 wheat, and 37.0 oats, while in 1909 the corresponding per cents were 87.9 for corn, 48.3 for wheat, and 47.0 for oats. Census indications, therefore, point to a movement away from wheat to oats, while corn easily holds its own as the leading cereal crop.

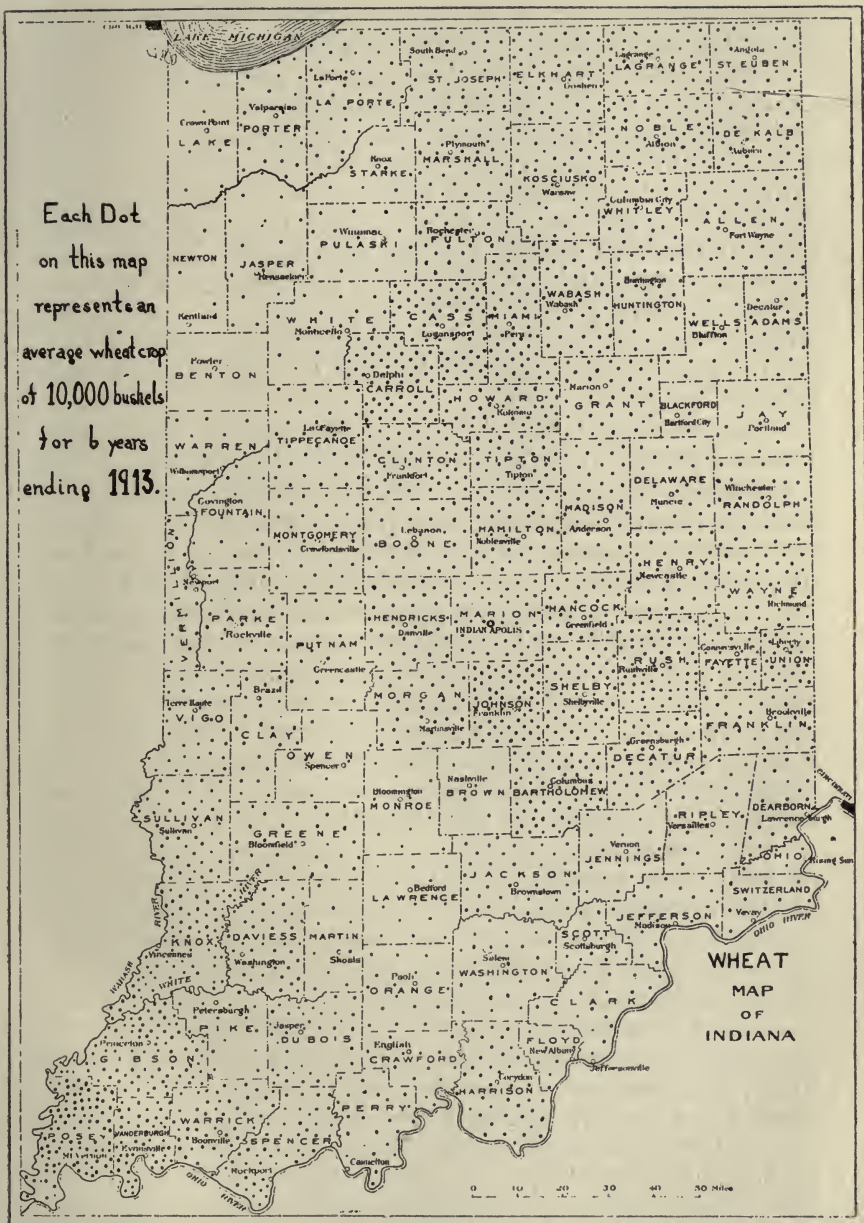
Figures for production and acreage, however, fail to do justice to Indiana as a cereal producing state, for her corn is of the highest quality. Hoosier corn growers have taken fourteen Grand Prizes out of the sixteen offered at the National Corn Expositions and Indiana corn was the best shown at the Panama-Pacific Exposition, taking twenty-three gold medals and fifty-seven other medals. Different men have brought these prizes to Indiana for two reasons: first, the superior facilities afforded by Nature for corn growing in this commonwealth, and, second, the expert exertions of the men themselves. In 1913 the land in Tipton County bore a mean crop of over fifty-seven bushels of corn per acre; seventeen other counties produced on the average between forty-five and fifty bushels of corn per acre, twelve between forty and forty-five, seventeen between thirty-five

and forty, nine between thirty and thirty-five, and thirty-six fewer than thirty. The mean for the commonwealth as a whole was just less than thirty-six bushels. In 1900 the average yield of corn per acre was greater in Indiana than in any state in the Union outside of New England, except Ohio. This is a very gratifying fact as the yield per acre is of greater importance than the total harvest in determining profit, for the fixed expenses of cultivation are so high that it is not worth while to raise corn unless the crop considerably exceeds thirty bushels. The accompanying map shows at a glance the sections of the state where corn is successfully cultivated, each dot representing forty thousand bushels. With the exception of Bartholomew County and a strip near the mouth of the Wabash, the corn land lies in a broad belt across the state just north of the southern boundary of the Wisconsin drift.

The wheat area, also, with the exceptions of Bartholomew County and the lower valley of the Wabash, is north of the southern boundary of the Wisconsin drift, but the belt is a roughly shaped crescent in the north east third of Indiana, the horns toward Ohio. In this crescent are included all but two of the sixteen counties which in 1913 produced over twenty bushels to the acre. Forty-two other counties were so fertile that the wheat crop averaged between fifteen and twenty bushels to the acre, and in no county did the mean fall below ten bushels. It may be enlightening to contrast the production of wheat in the foremost states. In 1909, North Dakota with an average crop of fourteen and three-tenths bushels per acre, raised nearly one hundred seventeen million bushels, and Kansas at the rate of thirteen bushels per acre raised seventy-seven and a half million bushels, while Indiana averaged *sixteen and three-tenths* bushels to the acre with a total crop of but thirty-three million bushels.

As in the case of corn, the value of the wheat crop of Indiana is considerably enhanced by the quality of the product. It is claimed that Indiana wheat makes flour that is inferior to none, and that is truly superior for ease of handling. Experiments in the department of Home Economics at Purdue seem to bear out these claims, as the Indiana wheat flour requires less kneading and less time for rising than do its competitors. So, altho the Hoosier farmers have found products less exhausting to the soil than a

Each Dot
on this map
represents an
average wheat crop
of 10,000 bushels
for 6 years
ending 1913.



steady succession of wheat crops, they are able to raise an absolutely large amount of high grade grain.

In respect to quantity, the oats crop, which for the six years ending in 1913 averaged more than forty-eight million bushels, now exceeds the wheat yield by half. The oats belt, like that of the wheat, forms a rough crescent in the northern half of the state; the horns, however, point north. In 1909 the largest oats crop, one hundred fifty million bushels, was raised in Illinois, and the next largest in Iowa, one hundred twenty-eight million, while Indiana with a harvest of fifty million bushels was the eighth state. Since in 1899 Indiana was the tenth state in respect to the acreage and crop of oats, the commonwealth has really progressed in the production of this cereal.

Altho in 1909 Indiana, with a crop of one million one hundred twenty thousand bushels, ranked sixth among the commonwealths for the production of rye, her crop was less than one-fifth that of Michigan, the leading state. Barley and buckwheat are raised in small quantities by a few farmers, but they are of slight importance compared with corn, oats, and wheat. Indiana's place as a cereal raising state can hardly be appreciated without mention of the fact that in 1913, of the total area of the commonwealth nearly thirty-six per cent,—considerably over one-third, was devoted to the grains. In 1909 Indiana stood eighth in the acreage planted in cereals, fourth in the bulk of product, two hundred eighty-one and a half million bushels, and fifth in the value of the cereal crops, \$151,898,000.

Next in importance to the cereals come the hays, which, in 1909, were worth \$24,883,000. With the exceptions of alfalfa, cow peas, and soybeans, which are most extensively cultivated in the southern counties, the forage and hay crops are raised in the northern half of the state and fed to the stock without ever leaving the farm.

Nowhere nearly as valuable, yet essential to a normal agricultural development are the "vegetables" raised in Indiana. Potatoes are planted all over the state, but the production for market has been carried on with greatest success in the three northern tiers of counties where considerably over half are raised. The total crop in 1913 was more than three million bushels. Even more narrowly is the onion belt delimited, for in 1913 seven-eighths of the yield of more than eleven hundred thousand bushels came from De-

kalb, Kosciusko, Laporte, Marshall, Noble, Starke, Steuben, St. Joseph, and Whiteley Counties. Another vegetable crop regularly worth half a million dollars is that of tomatoes. The cultivation of this vegetable centers largely in an area about Tipton County, which alone produced about a sixth of the 1913 crop; there is also another largely productive area in the southwest corner of the state. Green peas, sweet corn, and cucumbers are other garden vegetables raised in rather large quantities.

Some peculiar developments may be noted in the agricultural activities of Indiana. For example, in 1909, with a product of over twenty-one million pounds Indiana stood tenth among the tobacco raising states. By 1913 the crop had fallen to ten million pounds. Altho farmers in many parts of the commonwealth raise a bit of tobacco for their own use, Switzerland, Warrick, Ohio, Spencer, Jefferson, Dearborn, Franklin, Randolph, and Clark counties are the localities of successful commercial production. In respect to another commercial leaf Indiana enjoys a position almost unique. Nearly all the mint in the country is raised in the muck lands of southern Michigan and northern Indiana. In 1909 the harvest of about thirty-six thousand pounds was worth \$58,000. The larger growers distill their own oil, but others take their peppermint to the commercial stills. These northern counties afford also a rich hunting ground for the collectors of medicinal herbs. A third field, small from the standpoint of total financial returns, yet interesting because of the fact that Indiana ranks third, is the cultivation of cantaloupes and watermelons. Altho some melons are raised in Elkhart, Cass, and Laporte Counties, three-quarters come from a region in the southwest, centering about Knox, Sullivan, Gibson, Vigo, Posey, and Daviess Counties. Many other farm and garden crops have been discovered by the census takers, but it will be sufficient to enumerate peanuts, broom corn, sunflower seed, hemp, flaxseed, kafir corn, milo maize, emmer, and spelt. In short, the state affords a wide range of agricultural products.

Since the horticultural products of Indiana have been touched in the chapter on Trees, it is sufficient here to add that the northern counties offer excellent conditions for vineyards. The campaign of the Horticultural Society for

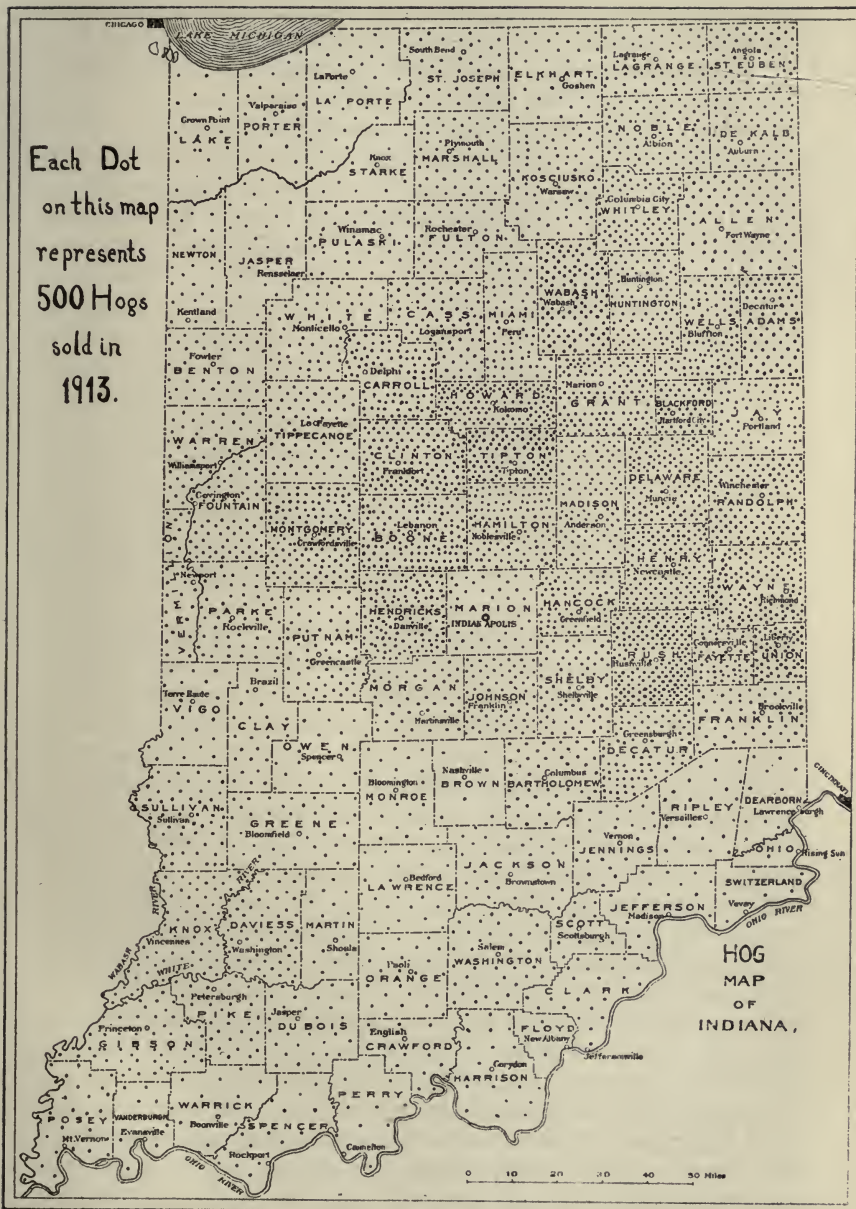
the extension of vinegrowing is spreading knowledge of the opportunity.

Animal Products.

When the market for grain was poor, a great many Indiana farmers used to "put their corn in the smoke-house;" today that institution has been supplanted by the large packing establishment, but the course of the maize is not essentially altered. These farmers have learned that by feeding their corn to hogs and cattle they can recover a great part of the valuable soil constituents in the form of manure, and thus maintain their land in a high state of fertility, and, at the same time, they can dispose of a profitable commercial product that is commanding even better prices. A comparison of the Hog Map with the Corn Map will show how intimate is the connection between large corn crops and the making of pork. A similar relation exists between the production of corn and of finished beef cattle. The difference between the two great meat producing industries is that the hogs are usually fattened by the breeder while in about fifty per cent of the cases the cattle for feeding are purchased. Some of these "feeders" are obtained from the markets at Chicago, Indianapolis, and Kansas City, but a large number are bought from the neighbors of the man who finishes them for the market. The successful beef farms are rather large, averaging nearly four hundred acres, but many farmers with less land who do not make a specialty of stock, find it well worth while to fatten a few hogs or steers as a byproduct. As the production of pork is largely localized in Ohio, Indiana, Missouri, Illinois, and Iowa, it is not surprising that in 1910 the last three named were the only states in the Union possessing more hogs than Indiana. The great centers of beef raising, however, are east in New York, and west in Iowa, and south in Texas; and so Indiana ranked sixteenth in the number of cattle on the farms.

The great enemy of the meat producer in Indiana is disease. The death rate among hogs after weaning was fifteen per cent in 1912, and thirteen and a half per cent in 1913, while that among cattle was considerably under two per cent each year. Nine-tenths of the hogs that die of disease succumb to hog cholera. After the discovery of the proper serum, a number of firms placed on the market

Each Dot
on this map
represents
500 Hogs
sold in
1913.



impotent vaccines, which failed to preserve life, and a considerable number of careless veterinarians administered the best serums in such a manner as to work more harm than good. The result was that vaccination for cholera fell into disrepute. It is with difficulty that the farmers are again being persuaded to take the steps absolutely necessary to eliminate this plague, for the combination of natural inertia with the fear of antagonizing neighbors and a dread of the great expense of the treatment is hard to overcome. The laws seem to be sufficient, for they require the testing at Purdue of all serums offered for sale, and they make it unlawful for any person controlling infected hogs to allow them to run on the highway, on lots or pastures belonging to another man or adjoining the pastures of another man, or in places where they have access to running water that may flow thru other pastures. As a result of the persistent propaganda of Purdue and the county agents, it is probable that in a few years more the farmers will insist upon protection from the carelessness of their neighbors, will extend the use of serum, and so will largely curtail these losses from disease.

Altho Indiana is not one of the great dairy states it does produce a large amount of milk and cream and butter. The total value of these products in 1913 was thirty-five million dollars, a sum four and a half million dollars less than the price of the cattle and hogs sold for meat. As practically all the feed needed by the cattle is raised within the commonwealth, and as transportation facilities are excellent, and as the climate nowhere within the state is too severe, it is probable that the dairy business will develop continuously as population grows, particularly in the portions of the state poorly adapted for the production of cereals. In 1913 there were milked on the average nearly half a million cows, that gave over two hundred million gallons of milk. A great problem in the dairy industry is the identification of the good animals, for a study made by the Purdue experts a few years ago resulted in the conclusion that of all the dairy cows in the state one-third were profitable, one-third just about paid their board, and about one-third were kept at a dead loss to the owner. The solution of this problem has probably been discovered in the cow testing association, a Danish innovation. There are now several of these coöperative enterprises in the state, and the leaders in ag-

ricultural progress are advocating their multiplication. A group of twenty-five to thirty farmers engage a man to visit each farm monthly to test the milk of each animal. From the results of these analyses it can be determined how much the output of each cow commands at the creamery; and a comparison of this figure with the cost of feeding and caring for her shows her status as a parasite or as a money-maker. Thus, by a system of accurate accounting a dairyman should be able to eliminate one large element of loss. In addition to advocating the formation of these cow testing associations, the Dairy and Extension Departments of Purdue University are seeking, with the aid of subscriptions from some large manufacturers of equipment, to improve the dairy business by encouraging the proper handling of cream, the best methods of caring for cows, the endeavor to cheapen shipping, and the advertising of Indiana butter.

Another animal source of food is poultry. In 1909 Indiana with a production of nearly seventy-seven million dozen eggs, stood fifth among the states. In 1913 the average number of laying hens was eight hundred thirty-four thousand dozen and there were over seven million fowls sold, mostly for food. The poultry produced in 1913 over fourteen million dollars worth of eggs and nearly four million dollars worth of meat. Indiana sheep sold for meat brought but two and a third million dollars, and the wool but six hundred thousand.

Many farmers derive some income from horse breeding, for they can use the mares for work about the farm, and at the same time by rearing two or three colts a year they may realize considerable profit. The quality of the animals has been somewhat improved by numerous local horse shows, that stimulate pride and emphasize fine points. To aid in raising the quality of the horses the General Assembly of 1913 passed a law requiring the enrollment of all stallions and jacks by a board of three men representing the Indiana Horse Breeders' Association, the State Board of Agriculture, and the staff in Animal Husbandry of Purdue University. The aim of this enrollment is the prevention of breeding to stallions with transmissible unsoundnesses, and the purification of the business, for advertisements are now required to state whether the stallion is pure, cross, grade, or scrub, and the certificate of enrollment is to be posted at the home stable and wherever service is offered.

Up to the first of November, 1914, the results of this enrollment showed that out of 4,743 stallions, 2,537 were pure bred, 1,153 grade, and 1,049 scrub. The pure percherons, numbering in all 1,182, were most popular in the northern part of the state; on the other hand, there were more grades in the southern half. The great bulk of the eleven hundred jacks were southwest of a line drawn from Lafayette to Vevay. The superiority of the pure bred horse has been demonstrated by Professor Thompson of Purdue, who has shown the selling value of this animal to be \$47.50 greater than that of the grade at one year and to be \$100 greater at four years. The total value of the horses sold in 1913 was eleven and a half million dollars, and that of the mules was about three million. Of course not all these sales were by the breeders, yet the figures give some idea of the size of the business.

Means of Encouraging Agriculture.

Because so large a proportion of the voters in Indiana are farmers, one would expect the General Assembly to do a great deal for agriculture, and a study of the situation discloses some excellent legislation. In the first place, the drainage laws have been so framed as to give the farmer every fair opportunity to remove surplus water. In the second place, the law encourages the construction of good roads by making their financing as easy as possible. Third, the owners of land are required to cut weeds if the view of a highway passing thru or beside their fields is obstructed by the growths, and they are to receive credit for such work on their road taxes. Likewise, owners of contiguous property are allowed to form associations for coöperation in ridding their orchards of the scales and other enemies of good fruit. Fourth, the state annually gives money to the State Corn Growers' Association, the State Livestock Breeders' Association, the State Dairymen's Association, and to other societies which promote various agricultural interests. Fifth, there is a State Board of Agriculture, which is merely a commission to organize the annual State Fair. The law allows, also, the formation of county societies for the improvement of agriculture and permits the counties to lend money to such organizations. The result of these laws is a large number of fairs, fifty-two being scheduled in 1915. The exact value of such fairs can never be estimated. Un-

doubtedly in the past they have been potent educational institutions, and perhaps they are still useful to set standards for products and to advertise new methods, while they certainly promote enjoyable sociability. Sixth, in 1913, it was made possible for not less than twenty-five persons to form a "coöperative" company, corporation, or association, and to distribute the profits in proportion to the value of goods bought from the society, to the commodities sold to it, or to service rendered to it. This law enables farmers to coöperate in the disposal of products or in the purchase of seeds, implements, and other supplies. Buying and selling thru such agencies are conducted with marked success in many states, and it is to be hoped that the Indiana farmers will speedily learn to unite as do those of Oregon, California, and Nova Scotia. Finally, the Department of Geology has been conducting soil surveys of the important agricultural counties in order to assist the farmers in scientifically undertaking the solution of their problems of fertilization and of soil modification.

All these and many other attempts to aid agriculture, fade into insignificance beside one great institution, Purdue. Founded on the Morrill Grant of 1862, and frequently laughed at in the days when applied science was considered sacrilege, this combination of school and experiment station has attained a commanding position in Indiana farming. The college which opened its doors in March, 1874, under the presidency of A. C. Shortridge, obtained in 1900 the services of W. E. Stone and under his guidance the enrollment has grown to over twenty-five hundred. In March, 1915, there were five hundred seventy-seven undergraduate students of agriculture. Altho some of these men devote themselves to teaching and research, a large per cent become farmers, and have a chance to demonstrate the cash value of their training, and to set high standards for their neighbors. Thus, the educational power of the University cannot be estimated in terms of the students brought to its classes. This is particularly true since the foundation in 1912 of the summer school for teachers of agriculture, manual training, and domestic science, for in six weeks these instructors can absorb much that will be helpful to the pupils in the common schools. The short courses for farmers given at the University have proved so valuable that it has been found advisable to carry them beyond the walls to the

farmers. In 1913 the short course in agriculture, consisting of twenty lectures and twenty-five laboratory or demonstration periods, was given in twenty communities, with an average attendance of seven hundred; and various short courses in home economics were offered in forty-two centers.

In addition to these short courses, Purdue approaches the farmer thru club work, actively assisting societies for the study of home economics, and encouraging agricultural organizations of boys and girls. In 1915 there were eighty of the women's clubs pursuing a regular course outlined at Purdue. Moreover, with the coöperation of the railways, special cars containing exhibits of interest to the farmers are sent about the state in charge of the University experts, who answer questions, explain specimens, and deliver formal lectures. Finally, the University annually furnishes speakers for a large number of county institutes which are valuable in presenting to the farmers the latest conclusions of the scientists, and of their progressive neighbors.

By no means all of the activities of Purdue have been mentioned in this sketch, but enough has been pointed out to demonstrate that in coming in contact with nearly half a million people every year, the University exerts a powerful influence. That the service is appreciated is proven by the fact that men are willing to pay for the privilege of taking short courses, and that the General Assembly stands ready to vote money to support the institution.

Indirectly Purdue plays a large part in one of the latest and most active means of helping the farmer to improve his work. Under the terms of the Vocational Education Law of 1913, if twenty or more residents of a county who are actively interested in agriculture file a petition with the county board of education for the appointment of a County Agricultural Agent, and accompany the petition with a deposit of five hundred dollars, the county board of education in turn petitions the county council which is required to set aside fifteen hundred dollars for the salary and expenses of the agent. Thereupon the Board of Education applies to Purdue University which in turn appoints the agent. The State pays half the agent's salary, but its contribution is limited to one thousand dollars. Within the first year of the operation of this law twenty-seven counties had obtained agents, and one township in Hamilton County had achieved what is probably a unique arrangement in a com-

bination of the school trustee, the local Better Farming Association, The United States Department of Agriculture, and Purdue University in the employment of a Township Agent. In 1915 there were thirty other county agents.

Since the work of these agents is not rigidly defined in the law, they are thrown largely upon their own initiative. As their appointment is received from Purdue University they are chosen on grounds of fitness for the task, which includes a wide technical knowledge of the methods and problems of the particular kinds of farming they are likely to encounter, and a huge fund of ingenuity, common sense, and tact. At meetings with their state leaders, Professor G. I. Christie and T. A. Coleman, they exchange views and information, and standardize their work. In a measure they achieve their results thru the children, forming clubs of boys and girls who become enthusiasts in competition for prizes, or in the study of agricultural methods; at times also they talk in the schools or instruct the teachers of agriculture. Thru the children the agent is frequently brought in contact with parents who otherwise could not be reached. Some agents have won their people by notable exploits. One, for example, achieved fame for stopping an invasion of cinch bug, and another earned gratitude and respect by organizing a corn testing week, when the school children tested the fertility of the individual ears held for seed by the farmers. The children gained the experience and the farmers were saved from the risk of planting infertile grains.

The agent tries to work thru the agencies for betterment that he finds in existence and to develop their greatest usefulness. He coöperates with the better farming associations, the farmers' institutes, the Gleaners, the Granges, the alfalfa clubs, and the schools. He seeks to make himself available by keeping at convenient times a regular office hour in the county seat when he is ready to consult and to offer advice. He organizes campaigns to improve specific conditions; to fight hog cholera, to improve the quality of seed corn, to better the roads, to protect the orchards by spraying, or to extirpate certain weeds. One held a "Miners' garden party" to encourage vegetable raising among the Sullivan County coal miners, another operates a very poor farm to show what skilled management can accomplish, while a third gave a short course in agriculture. In

brief, the agent tries to render efficient service to all who come for advice, and to inspire by every possible means the ambition of his clientele for better farming. As yet it is too early to estimate this innovation, but enough has already been accomplished in many counties to more than justify the expenditure. The principle is certainly sound; the employment by the community of an expert who shall help the poor farmer to make up for his lack of technical knowledge, is conducive to efficiency and at the same time democratic.

Summary.

The climate and soil of Indiana, especially north of the southern boundary of the Wisconsin drift, are a splendid basis for a great development of agriculture. Altho there is a steady increase in farm tenancy and in the number of mortgaged farms, the condition of the farmers in Indiana seems to be on the whole better than in many sections of the United States. This may be partly due to the predominance of native American stock in the agricultural population. The chief crops in Indiana are the cereals; foremost among these are corn which is of very good quality, oats, and wheat which makes a high grade flour. There is a large variety of other important crops, some of which are unique. Since a large part of the corn, oats, and grass is fed to stock, Indiana has won a prominent place in the production of first class pork and finished beef. The dairy cows, horses, and poultry also are abundant sources of wealth. The state has devoted a great deal of energy to improving farming, and it is accomplishing much thru the activities of Purdue, and thru the new institution of the county agent. All in all Indiana is a great agricultural commonwealth with the prospect of rapid progress as science advances.

Products of Farms in Indiana 1913.

PRODUCT	AMOUNT	ACREAGE	VALUE
Wheat	29,728,847 bu.	1,796,637	-----
Corn	161,276,315 bu.	4,488,443	-----
Oats	41,918,820 bu.	1,754,776	-----
Rye	2,726,563 bu.	207,680	-----
Barley	197,788 bu.	10,372	-----
Buckwheat	77,567 bu.	5,751	-----
Watermelons and Cantaloupes	-----	8,057	\$ 506,244
Berries	232,459 bu.	4,514	-----
Apples, Peaches, Pears, & Plums	897,635 bu.	-----	-----
Potatoes (produced for market)	3,137,228 bu.	42,912	-----
Onions (produced for market)	1,145,512 bu.	4,285	-----
Tobacco	10,049,280 lb.	10,818	-----
Tomatoes	125,224 tons	27,209	-----
Timothy Hay	1,119,016 tons	1,213,711	-----
Prairie, Wild, and Millet Hay	90,143 tons	91,730	-----
Clover Meadow Hay	877,984 tons	832,156	-----
Clover Seed	491,015 bu.	380,251	-----
Alfalfa	69,937 tons	36,624	-----
Cowpeas and Soybeans	79,317 tons	81,682	-----
Milk	215,991,839 gal.	-----	28,034,781
Butter	40,954,419 lb.	-----	9,097,017
Hogs (sold)	1,323,610	-----	18,435,851
Sheep (sold)	478,266	-----	2,314,677
Cattle (sold)	477,123	-----	21,343,476
Cows Milked (average)	479,149	-----	21,849,815
Wool Clip	2,879,014 lb.	-----	605,692
Laying Hens (average)	834,444 doz.	-----	4,721,777
Poultry (sold)	646,508 doz.	-----	3,795,057
Hens' Eggs (produced)	72,928,249 doz.	-----	14,403,477
Horses and Colts (sold)	92,598	-----	11,481,455
Mules (sold)	25,482	-----	3,166,732

CHAPTER IV.

Manufactures

Some years ago the South Chicago plant of the Illinois Steel Company was so hemmed in by the works of other concerns that the only possibility for expansion lay in creating new land by filling in the lake. Therefore the company poured its slag into the water. After a while, when it had made enough dry ground to warrant construction, the corporation applied for a building permit. Mayor Dunne, however, not only refused to sanction the plans but even commenced suit to recover the land for the city of Chicago, asserting that the alteration of the waterfront without permission was illegal. This situation was one of the most potent reasons for founding what is in many ways the most wonderful of American municipalities.

Gary.

When the Illinois Steel Company chose the site for its new plant, Gary consisted mostly of sand dunes and railroad tracks, for this strip of lake shore lay on the route of the trunk lines between Chicago and the Atlantic seaboard. In order to make room for the plant three of these roads had to be moved, and incidentally their tracks were elevated for miles in order that the citizens of the future metropolis might go about in safety. A subsidiary corporation, the Gary Land Company, which was responsible for planning the town and for disposing of the lots, made the streets broad, and sought to insure the permanency of the pavements by the construction of alleys with conduits to carry such utilities as water, sewers, gas, electricity, and telephone wires. Both comeliness and utility were emphasized. Lots were made large enough that the houses might be set back thirty-five feet from the walks, parks were planned, and a considerable number of dwellings were erected for the employees of the corporation. While paternalism was con-

sistently avoided, an attempt was made to give the "Hunkies" "white men's houses to live in."

The city grew marvelously. Rich black loam—was brought from the distant prairies and spread over the sand to form a basis for lawns and flower beds. Frequently a family would move into a house within twenty-four hours of the erection of its frame. One church, begun after lunch, was used for a congregational supper that evening, and for a preaching service the next morning. In spite of the wonderful activity of the Gary Land Company in providing housing, there was for a time desperate overcrowding among the unskilled workers. For example, in 1909, three years after the birth of the city, an investigator found four hundred twenty-eight persons inhabiting one hundred forty-two rooms in thirty-eight houses. Of course this rapid growth of population greatly increased the value of the land. Since the Gary Land Company recognized the social dangers from speculation it consummated sales only after the prospective purchaser offered satisfactory assurance that he intended permanently to occupy and to use his ground. So it happened that building lots were offered on reasonable terms.

Unparalleled as was the achievement of building this city, it was but an incidental part of the erection of the enormous steel plant. An artificial harbor has been created with almost a mile of twenty-two foot channel nearly a hundred yards wide, and a turning basin two hundred fifty yards in diameter. Since the investment in one of the lake steamers is so precarious that it is necessary to have the vessel in motion every possible minute during the season of navigation, the speed of taking on and of discharging cargo is of tremendous importance. So the ore is unloaded by ten ton grab-buckets. This ore, unless it is stored for winter use, is conveyed rapidly to the blast furnaces, and is carried on tracks that never turn at right angles thru all the processes of manufacture to the delivery spur tracks, with a minimum of reheatings. In this plant nothing is experimental, every device has previously proven its economy. Every byproduct is utilized. The company which is ruthless in its requirements of its employees, has nevertheless developed a systematic plan of accident prevention that has succeeded in largely reducing the number of mishaps.

The Illinois Steel Company has not remained the only

industry in the city, for the American Bridge Company, the American Steel Company, the National Tube Company, the American Locomotive Company, and the American Car and Foundry Company are among a number of very large concerns that have located plants at Gary. Even now the city has a few factory sites that are free to persons who can give proper guarantee of success. The European war has been the occasion of a great development of the preparation of munitions at several points close to Gary.

The reasons for the deliberate choice of Gary for a manufacturing center are not far to seek. In the first place, land was to be had for a song, because the sand was well-nigh useless for agricultural purposes. Second, since the area was traversed by all the large railways of what is known as the trunk line class, the two and four track lines between Chicago and the eastern seaboard at Boston, New York, Philadelphia, and Baltimore, competition in respect to service was assured. Moreover, the place is convenient to Chicago with its wonderful transportation facilities. Third, Gary is the strategic meeting point of the raw materials that are necessary for the manufacture of steel. Coke can be secured from Pennsylvania, coal is obtained from Indiana and Illinois, lime is quarried in Indiana, and iron ore can be brought by swift steamers from the Minnesota mines on Lake Superior. Finally, Gary is situated close to the center of population, and is therefore at the heart of the market for products of all kinds, including steel.

Gary is not quite unique in its industrial advantages. There is no reason why Whiting, Hammond, East Chicago, and the whole lake front from the Illinois line to Michigan City should not be eventually one great manufacturing center.

Other Northern Cities.

While the lake front is the most promising industrial region in Indiana, there are a number of other cities in the northern half of the state that are already prosperous or rapidly developing manufacturing centers. Among these may be mentioned Anderson, Elkhart, Elwood, Fort Wayne, Huntington, Kokomo, Lafayette, Laporte, Logansport, Marion, Mishawaka, Muncie, Peru, and South Bend. Some of these municipalities owe their start as factory towns to the supply of natural gas that for over a decade made fuel very

cheap, but all share to a considerable extent the same advantages of the central location of Indiana and her network of railways. And they are close enough to the mines to enjoy cheap fuel.

The Southern Cities.

South of the line from Richmond to Terre Haute there is only one city, Evansville, that can claim importance as a manufacturing center, altho Vincennes, New Albany, and Jeffersonville, with their river locations are not slow in asserting their advantages. There are, of course, sufficient reasons for the industrial backwardness of the southern half of the state. In the first place, the section is away from the main highways of trade, and the freight service is much less efficient than is necessary for manufacturing prosperity. Second, altho coal is cheap, the hardwood forests, iron ores, and rich farms are so remote that raw materials are necessarily more expensive than they are farther north. However, the southern cities have taken advantage of their own peculiar opportunities. Bedford, for instance, has a number of prosperous stone mills which owe their existence to the wonderful limestone quarries; and Jeffersonville has a "shipyard" that claims to have turned out more vessels than any similar establishment in the world. Third, the population of the southern counties seems less energetic than that of those farther north. Of course in this decade with modern methods of finding hands, labor can be had wherever it can be used profitably. So the difference in the character of the population is not as important in its influence upon the common workingmen as in the relative lack of persons with organizing ability. Perhaps this difference in "push" can best be illustrated by reference to the activities of chambers of commerce, which are much more numerous and enterprising in northern Indiana. This upper half of the commonwealth seems to have been settled by a stock drawn from the most progressive sections of the early United States. This strain has received large reinforcements, the men who established factories soon after the discovery of gas in 1886, men who had the judgment and courage to move into the region of cheap power. Possibly a part of the human inertia in southern Indiana is due to the enervating effects of the warmth and the moisture of the climate. Whatever the reasons, it is certain that indus-

tries are far more advanced in the northern than in the southern part of the state, and that the immediate prospect for further growth lies in the north.

The Middle Line.

On a line drawn roughly across the center of the commonwealth lie Richmond, Indianapolis, and Terre Haute, three important manufacturing cities, two of which deserve special mention. In some respects Terre Haute seems to have the greatest advantages, for, aided by the transportation facilities afforded by the Wabash River, it had an early start. Moreover, Vigo County is the largest coal producing area in the state and furnishes excellent clay and shale for the making of tile and fire brick. Fourteen railroads assure good freight service. Why this city, "the Pittsburgh of the West," has not surpassed Fort Wayne, South Bend, and Evansville in the value of its manufactured products is difficult to discover. Perhaps the safest explanation is the character of the municipal government which has been notoriously corrupt for a great many years.

Not quite so well situated in the midst of natural resources as Terre Haute, but vastly more important in her industrial development, is Indianapolis. Hewn out of the wonderful hardwood forests, the Capital early became an important lumber center, but as the trees were driven back before the farms, the saw-mills found relatively less and less to do. The first extensive development of Indianapolis as a general manufacturing center seems to have resulted from the fact that many railroads entered the city, or passed thru it. So the metropolis naturally attracted jobbers and factories until today its wholesalers market their goods right up under the skyscrapers of Louisville and Cleveland. And a large part of their wares are Indianapolis products. In the eighties, manufacturing in the Capital received a new impetus when natural gas became available, and finally, at the beginning of the present century, the interurban powerfully supplemented the other forces in the upbuilding of the metropolis. At the present time the value of the manufactured products of Indianapolis exceeds that of any one of seventeen states, and she stands nineteenth among the cities of the nation for the importance of her industry.

What is responsible for the great industrial development of Indianapolis? First is the fact that there is rail-

road competition in nearly every direction, which means that shipments "move," and altho the freight rates have in the past militated somewhat against the Capital City, they now seem fairly adjusted. In the second place, fuel of high steaming qualities is very cheap, since competing railroads bring coal from competing mining districts. Third, Indianapolis is but forty-five miles from Bloomington, the center of population of the United States, and is therefore close to the heart of the national market. Fourth, the city is well situated to secure a cheap supply of raw materials, for the rich farming land of the surrounding counties furnishes fat pork and beef as well as grain in abundance, and other supplies can readily be obtained from mines, quarries, farms, and forests of Indiana and adjacent states. Finally, Indianapolis has been exceptionally free from serious labor disturbances. This comparative industrial peace combined with the large per cent of highly efficient native Americans in the population has given the city a satisfactory labor force.

Without the corporate limits, but upon a branch of the Belt Line, a new industrial suburb, Mars Hill, offers free sites to manufacturing plants which promise to be highly successful. With low taxes, excellent water, and all the advantages of the Capital, it is likely that this suburb will soon develop into an important industrial center. Only time can tell, but it seems probable that Indianapolis will long continue to maintain her present position as "the greatest Inland City."

The State as a Whole.

Altho Indiana is not usually classed among the industrial states, the factories of the commonwealth in 1909 employed an average of 210,000 persons. Whereas the total worth of all the farm products in 1909 was \$328,000,000, the value of the products of the factories was \$579,000,000, of which the sum of \$244,000,000 is attributable to the manufacturing process. Moreover, the 1910 Census of occupations showed 344,454 persons in the state engaged in Agriculture, Forestry, and Animal Husbandry, and 310,402 employed in Manufacturing and Mechanical pursuits. Still another evidence of the importance of Indiana's industrial interests is the fact that from 1904 to 1909 the increase in the value of factory products and in the value added in

manufacture was at a rate considerably more rapid than for the country as a whole. Indeed, since 1849 Indiana has risen from fourteenth to ninth place among the states as a seat of manufacturing.

Half a century ago the large industries of the commonwealth were based almost entirely upon her agriculture and her forests. Of the total product of the factories in 1860, which was worth about \$43,000,000, flour and meal amounted to \$17,000,000, sawed lumber to \$4,271,000, provisions to \$3,350,000, and liquors to nearly \$2,500,000. Thus the four leading industries used raw materials native to Indiana, and produced over five-eighths of the total output. On the other hand, in 1909 the ten leading industries were responsible for but a trifle over half of the product, and for less than half of the value added in manufacture. Hence the industrial field has broadened and at the same time dependence upon the natural resources of the state has waned. The following table shows the ten leading industries in Indiana in 1909, their relative importance, and their places in the manufacturing of the nation.

Ten Leading Manufacturing Industries of Indiana in 1909.

INDUSTRY	Rank Among Manufacturing Industries		Per cent of Wage Earners in Manufactures of		Per cent of Value of Manufactured Products of		Per cent of Value added by Manufacture in	
	Indiana	U. S.	Indiana	U. S.	Indiana	U. S.	Indiana	U. S.
Slaughtering and Meat Packing	1	1	2.4	1.4	8.2	6.6	2.2	2.0
Flour and Gristmill Products	2	5	1.2	0.6	7.0	4.3	2.3	1.4
Foundry and Machine Shop Products	3	2	8.5	8.0	6.9	5.9	8.7	8.1
Iron and Steel, Steel Works and Rolling Mills	4	4	6.6	3.6	6.7	4.8	5.1	3.8
Liquors, Distilled	5	26	0.2	0.1	5.5	1.0	11.0	2.0
Automobiles, including Bodies and Parts	6	22	3.6	1.1	4.1	1.2	3.6	1.4
Lumber and Timber Products	7	3	5.5	10.5	4.0	5.6	4.4	7.6
Carriages, Wagons, and Materials	8	31	4.7	1.1	3.7	0.8	3.8	0.9
Furniture and Refrigerators	9	23	6.0	1.9	3.2	1.2	4.1	1.5
Cars and General Shop Construction, Steam Railroad Co's.	10	12	6.9	4.3	3.0	2.0	3.8	2.4
TOTALS			45.6	32.6	52.3	33.4	49.0	31.1

As far as the value of output is a criterion, slaughtering and meat packing, with products worth \$47,000,000, was the most important industry. Yet the number of bees, hogs, and sheep converted into meat was considerably less

in 1909 than a decade before, because between the censuses of 1899 and 1904 the largest packing house in the state moved from Hammond into Illinois, and nearly cut in half the extent of the meat business in Indiana. However, there has been so rapid an increase in prices that by 1909 the value of the meat was greater than in 1899.

Altho the number of barrels of white flour, of buckwheat flour, and of cornmeal, and the number of tons of feed manufactured in Indiana was in each case less in 1909 than in 1899, the value of the products of flour and grist mills has steadily increased. Nevertheless, the state has now fallen from sixth to eighth place in this branch of industry, partly because of the unfavorable railroad rates in the nineties when the freight tariffs favored the hauling of wheat rather than flour, partly because of the policy of the railroads to encourage milling in a few great centers, and partly because of the relatively greater advantages of raising corn than wheat in Indiana.

Between 1899 and 1909, foundry and machine shop products, iron and steel from steel works and rolling mills, and distilled liquors practically doubled in value, and the manufacture of automobiles was begun, the first gasoline driven car ever made having been constructed at Kokomo in 1893. On the other hand, in the same period the preparation of lumber and timber products was cut in half, so far as the quantity of output is concerned, but the value of the products was only slightly diminished. Similarly, altho the value of carriages, wagons, and materials produced increased during the decade, the number of vehicles turned out in every class except that of business wagons fell off in the five years ending in 1909. The value of furniture and refrigerators produced has increased, mainly because it has been possible to import hard woods.

The trend of Indiana manufactures from industries using raw materials produced in the state to lines depending on stuffs from without the commonwealth is undeniably demonstrated by a comparison of the data for 1860 with the situation in 1909 as shown by the table at the end of this chapter. In 1860, it will be recalled, four industries based on raw materials of the state, produced five-eighths of the manufactured products. This rough classification of industries shows that of the products of Indiana manufactures about twenty-nine per cent originate in raw materials

from her own farms and forests, and a little over six per cent derive their stocks from other resources of the state. Therefore less than three-eighths of the manufacturing is primarily a state affair, while nearly two-thirds involves importation of raw materials. There is nothing deplorable in such a condition, for the most highly industrialized of the United States have to rely on other regions for an even larger per cent of their raw materials.

Another interesting aspect of manufacturing in Indiana is disclosed by a comparison of the degree of concentration of industry in several of the leading industrial states, as described in the following table:

Concentration of Manufacturing Industry, 1909.

STATE	PER CENT OF			PER CENT OF		
	Wage Earners	Products	Value Added in Manufacture	Wage Earners	Products	Value Added in Manufacture
	In Five Largest Factory Industries			In Ten Largest Factory Industries		
Rhode Island --	66.8	61.6	60.4	72.9	69.8	67.0
Massachusetts --	52.6	46.9	46.7	60.8	59.0	55.8
Illinois -----	34.6	41.2	34.0	43.5	54.1	48.4
Pennsylvania --	30.8	39.3	33.4	46.5	51.5	47.3
Ohio -----	26.0	36.6	27.4	41.6	48.8	42.7
Indiana -----	18.9	34.3	29.3	45.6	52.3	49.0
New York -----	32.2	30.8	34.6	41.2	42.3	46.3
New Jersey -----	23.0	28.7	21.4	34.2	40.3	33.7
United States --	24.1	27.2	22.9	42.9	41.1	39.3

These figures show that Indiana resembles the great industrial states in the fact that her manufactures are so largely concentrated, five leading industries producing a full third of her products and ten producing well over half. Altho she exhibits no such intense specialization as does Rhode Island, a state having over five hundred inhabitants to the square mile and nearly ninety-seven per cent of her population in incorporated cities of twenty-five hundred or more, the Hoosier commonwealth does show considerably greater concentration than the United States as a whole.

In still another respect can the claim of Indiana to rank among the foremost of the industrial states be upheld, for in 1909 over forty-seven per cent of the output of her factories was produced by establishments doing a business of a million dollars or more, while for the United States as a whole forty-four per cent of the manufacturing was done in

the large plants. This is not a striking difference until one notes that in 1904 the facts were reversed, thirty-eight per cent of the value of the products of the factories of the country as a whole and thirty-four per cent of those of Indiana coming from the larger establishments. For this reason it seems that the state is developing the typical large factory of the industrial communities.

Reasons.

First among the forces that have combined to make possible this industrial development in Indiana must be put the geographical location of the commonwealth. Including within her borders both the center of population and the center of manufactures for the United States as a whole, Indiana is superbly situated to capture wide markets and to secure cheap raw materials. Moreover, the state touches the Great Lakes, and lies across the path of the great trunk lines of railroad, and many north and south lines, and has, therefore, exceptionally good transportation facilities. Second may be mentioned the ease of obtaining power. Altho the Hoosier rivers are lacking in good dam sites and the supply of gas seems to be nearly exhausted, coal of excellent steaming qualities is cheap all over the state. Third, the land which furnished wheat and lumber to the early mills, still produces wheat, and brings forth abundant corn. The grains are now turned into meat and liquors. Many other natural resources, especially sands and clays, furnish bases of profitable industries. Fourth, the labor supply has been ample, peaceable, and intelligent, but the small proportion of alien workers is now being increased by the hosts of immigrants to the coal fields and to the northwest corner of the state. In view of these conditions, and especially in view of the peculiar advantages of the lake front, it seems not beyond reason to expect an increasing growth of manufacturing in Indiana.

Manufactures in Indiana, 1909.

	Number of Establishments	WAGE EARNERS		VALUE OF PRODUCTS		VALUE ADDED BY MANUFACTURE		Per cent of Increase in Value of Products		Per cent of Increase in Value Added by Man'rs	
		Number	Per cent	\$	Per cent	\$	Per cent	1904	1899	1904	1899
								1909	1904	1909	1904
A. Main Raw Material a Product of Indiana Agriculture or Forests											
	2305	20,876	11.2	167,279,000	29.0	57,572,000	23.5				
1. Slaughtering and Meat Packing	61	4,423	2.4	47,289,000	8.2	5,303,000	2.2	60.7	-32.9	66.4	-39.4
2. Flour and Grist Mill Products	563	2,298	1.2	40,541,000	7.0	5,539,000	2.3	11.2	25.6	7.9	21.2
3. Liquors, distilled	14	428	.2	31,610,000	5.5	26,898,000	11.0	54.0	21.0	53.5	16.6
4. Bread and other Bakery Products	754	2,505	1.3	10,209,000	1.8	3,983,000	1.6	47.2	66.5	42.0	53.5
5. Canning and Preserving	134	3,406	1.8	8,758,000	1.5	2,813,000	1.2	48.6	87.4	21.2	89.5
6. Liquors, Malt	37	1,594	0.9	8,313,000	1.4	6,324,000	2.6	34.2	7.3	42.6	-4.6
7. Glucose and Starch	4	866	0.5	5,750,000	1.0	1,068,000	0.4	180.8	106.9	94.5	24.8
8. Tobacco Manufactures	470	2,794	1.5	4,155,000	0.7	2,565,000	1.0	6.4	50.5	10.4	39.9
9. Butter, Cheese, and Condensed Milk	132	488	0.3	3,959,000	0.7	763,000	0.3				
10. Leather Goods	118	1,240	0.7	3,406,000	0.6	1,404,000	0.6	70.5	39.8	56.0	50.0
11. Leather, Tanned, Curried, and Finished	10	398	0.2	2,311,000	0.4	598,000	0.2	119.9	-33.9	108.4	-28.8
12. Boots and Shoes, including cut stock and findings	8	436	0.2	978,000	0.2	314,000	0.1	112.6	-50.9	96.2	-38.2
B. Main Raw Material an Indiana Resource not a Product of Agriculture or Forests											
	954	23,078	12.3	37,365,000	6.3	22,826,000	9.3				
1. Glass	44	9,544	5.1	11,593,000	2.0	6,865,000	2.8	-21.2	-0.3	-25.0	-10.1
2. Cement	11	2,318	1.2	7,022,000	1.2	2,863,000	1.2	447.3		232.5	
3. Marble and Stone Work	200	3,283	1.8	5,756,000	1.0	3,996,000	1.6	69.3	106.5	79.8	110.4
4. Brick and Tile	311	3,788	2.0	4,719,000	0.8	3,414,000	1.4	23.6	30.3	20.4	19.2
5. Gas, Illuminating and Heating	53	928	0.5	3,147,000	0.5	2,045,000	0.8	71.1	77.9	61.3	63.0
6. Pottery, Terra Cotta, and Fire Clay	31	2,186	1.2	2,966,000	0.5	2,107,000	0.9	12.2	104.7	5.5	104.0
7. Ice, Manufactured	85	563	0.3	1,311,000	0.2	985,000	0.4	75.3	37.5	67.8	38.8
8. Artificial Stone	219	468	0.2	851,000	0.1	551,000	0.2	295.8		274.8	
C. Main Raw Material a Product of Agriculture, not Raised in Indiana, or of Forests outside of Indiana											
	2141	48,915	26.1	104,526,000	17.9	48,717,000	19.9				
1. Lumber and Timber Products	1277	10,317	5.5	23,135,000	4.0	10,753,000	4.4	7.7	-16.3	10.6	-23.8
2. Carriages, Wagons, & Materials	221	8,867	4.7	21,655,000	3.7	9,197,000	3.8	12.4	21.8	9.6	15.6
3. Furniture and Refrigerators	201	11,284	6.0	18,456,000	3.2	9,996,000	4.1	32.2	59.2	21.3	74.0
4. Clothing, Men's including Shirts	42	4,073	2.2	8,029,000	1.4	3,377,000	1.4	48.1	27.0	56.5	20.8
5. Paper and Wood Pulp	27	1,501	0.8	5,202,000	0.9	1,705,000	0.7	32.8	-6.1	21.8	-17.6
6. Patent Medicines and Compounds and Druggists Preparations	113	801	0.4	4,344,000	0.8	2,884,000	1.2	-1.5	83.5	-2.4	73.7
7. Musical Instruments, Pianos and Organs, and Materials	15	1,667	0.9	3,686,000	0.6	1,983,000	0.8				
8. Confectionery	64	885	0.5	2,558,000	0.4	1,035,000	0.4	67.2	22.5	48.1	25.3
9. Cotton Goods, including Cotton Small Wares	7	1,582	0.8	2,502,000	0.4	832,000	0.3	68.6	11.2	141.9	-45.7
10. Cooperage and Wooden Goods, not elsewhere specified	57	891	0.5	2,398,000	0.4	899,000	0.4	-13.6		-9.5	
11. Hosiery and Knit Goods	5	1,933	1.0	2,381,000	0.4	1,466,000	0.6	13.1	-13.2	46.6	-18.3
12. Clothing, Women's	18	1,291	0.7	2,058,000	0.4	1,001,000	0.4	-2.2	67.8	-10.7	84.7
13. Paper Goods, not elsewhere specified	8	719	0.4	1,887,000	0.3	663,000	0.3	142.2	101.8	183.3	30.0
14. Woolen, Worsted and Felt Goods and Wool Hats	11	776	0.4	1,570,000	0.3	514,000	0.2				
15. Coffins, Burial Cases and Undertakers Goods	19	669	0.4	1,448,000	0.2	747,000	0.3	30.8	38.5	17.6	49.1
16. Mattresses and Bed Springs	27	553	0.3	1,287,000	0.2	596,000	0.2	50.7	66.8	42.9	86.2
17. Boxes, fancy and paper	13	550	0.3	782,000	0.1	360,000	0.1	92.1	74.7	87.5	39.1
18. Musical Instruments and Materials, not specified	9	390	0.2	610,000	0.1	502,000	0.2	73.3	70.9	90.2	58.1
19. Millinery and Lace Goods	7	166	0.1	538,000	0.1	207,000	0.1	96.4	163.5	52.2	126.7

MANUFACTURES

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Manufactures in Indiana, 1909. [Continued.]

	Number of Establishments	WAGE EARNERS		VALUE OF PRODUCTS		VALUE ADDED BY MANUFACTURE		Per cent of Increase in Value of Products		Per cent of Increase in Value Added by Man'rs	
		Number	Per cent	\$	Per cent	\$	Per cent	1904 — 1909	1899 — 1904	1904 — 1909	1899 — 1904
D. Main Raw Material not a Product of Agriculture or of Forests and not a Product of Indiana	1797	72,427	38.7	181,262,000	31.4	85,635,000	35.0	-----	-----	-----	-----
1. Foundry and Machine Shop Prod'ts	415	15,809	8.5	39,884,000	6.9	21,265,000	8.7	55.8	24.9	52.6	32.2
2. Iron and Steel, Steel Works and Rolling Mills	17	12,255	6.6	38,652,000	6.7	12,553,000	5.1	128.4	-12.5	108.7	-12.8
3. Automobiles, including bodies and parts	67	6,797	3.6	23,764,000	4.1	8,769,000	3.6	1349.9	-----	976.0	-----
4. Cars and general shop construction and repairs by Steam R. R. Co's.	34	12,884	6.9	17,128,000	3.0	9,252,000	3.8	18.0	41.7	23.2	56.9
5. Printing and Publishing	892	6,756	3.6	14,356,000	2.5	10,331,000	4.2	25.1	28.0	24.5	26.9
6. Agricultural Implements	39	4,749	2.5	13,670,000	2.4	8,806,000	3.6	69.6	25.7	73.1	34.0
7. Cars, steam-railroad, not including operations of railroad companies	7	4,084	2.2	9,498,000	1.6	3,189,000	1.3	-5.4	11.4	-0.1	17.4
8. Electrical Machinery, apparatus and supplies.	42	3,073	1.6	7,718,000	1.3	4,025,000	1.6	170.1	80.1	124.9	123.2
9. Copper, Tin, and Sheet Iron products	146	2,121	1.1	5,763,000	1.0	2,332,000	1.0	99.8	-----	68.1	-----
10. Wire Works, including wire Rope and Cable	31	689	0.4	3,161,000	0.5	819,000	0.3	86.4	54.2	46.2	1.3
11. Stoves and Furnaces, including Gas and Oil Stoves	24	1,362	0.7	2,751,000	0.5	1,730,000	0.7	35.5	-----	41.5	-----
12. Brass and Bronze Products	21	468	0.3	1,379,000	0.2	605,000	0.2	-----	-----	-----	-----
13. Paint and Varnish	18	200	0.1	1,108,000	0.2	425,000	0.2	48.1	85.6	36.7	110.1
14. Cutlery and Tools, not elsewhere specified	24	572	0.3	933,000	0.2	530,000	0.2	10.7	-43.6	12.3	-50.5
15. Scales and Balances	8	266	0.1	877,000	0.2	669,000	0.3	321.6	60.0	300.6	70.4
16. Gas and Electric Light Fixtures and Lamps and Reflectors.	12	342	0.2	620,000	0.1	335,000	0.2	-----	-----	-----	-----
E. All Other Industries	772	21,688	11.6	88,643,000	15.3	29,950,000	12.2	-----	-----	-----	-----

CHAPTER V.

Transportation

If the French "gained their entrance to the new continent of America thru the back door," Indiana was the threshold. Indiana was useful to these people because of the fact that the best route from the St. Lawrence to the Mississippi led down the Wabash River into the Ohio. On the banks of these two streams the settlement of the state began. On their waters the first extensive commerce sprang up, first the French fur trade and later the shipments of the colonizers from the Atlantic coast, shipments mostly of pork, beef, tallow, tar, fur, and flour, the products of a very primitive stage of culture. It is surprising to learn that hundreds and even thousands of flatboats laden with these articles of commerce annually passed down the Wabash and White Rivers, and that even as late as 1830 steamers ascended as far as Lafayette. Indeed, it was once asserted that the state afforded twenty-five hundred miles of navigable water ways, but the author of this statement, Timothy Flint, included any brook that seemed capable of floating a flatboat at high water. The state has spent much money building canals along the courses of these streams, or connecting them, but today, an occasional water-power is the only commercial function of these canals, which in the forties played an important part in the development of the commonwealth. Particularly was the "Wabash and Erie Canal" instrumental in building up the northern part of the state. By furnishing cheap transportation in a community where the commercial range of a barrel of flour was one hundred fifty miles because its value was eaten up completely by the cost of carrying it farther, these canals actually did encourage trade. They also furnished water-powers to mills that sprang up on their banks, and thus attracted settlers to the farms along the routes. Altho they failed financially, they left their impress upon

the state, for they did contribute materially to its progress.

Today an occasional enthusiast agitates the canalization of the Wabash or the White River, or the construction of a water way to connect Lake Michigan with Lake Erie. Such a man is blind to the fact that was clear to Governor Ray in 1830; a canal costs many times as much as a railway that will afford equal carrying capacity, and is, in these latitudes, out of service part of the year because of ice, and, in addition, it affords too slow a method of transportation. The only water ways of importance in Indiana today are the Ohio and Lake Michigan. The lake traffic seems to bid fair to increase indefinitely as the shore becomes more and more thickly covered with large industrial undertakings, such as the steel plants at Gary and at East Chicago.

Roads.

The early settlers of Indiana could not do all their traveling by water; consequently they followed the Indian trails that led everywhere in an intricate network. But these trails were not suitable for the passage of wagons, so the earliest roads were laid out by the simple process of clearing away enough timber and brush to permit a wheeled vehicle to go thru. Lest the traveler lose his way these "traces" had to be marked by blazing. The "Three Notch Road," for instance, which went south from Indianapolis in the early days of the Capital's existence, was distinguished by three ax marks on the trees at frequent intervals. Many of these early roads followed the Indian trails which had been so well placed that engineers could not improve upon the judgment of the savages; even the Pennsylvania Railroad has adopted one of these routes most of the way from Richmond to Indianapolis.

By the time that Indiana became a state, the need for good roads was beginning to be imperative, and it was not long before comprehensive plans were formed. By 1820 a system had been conceived which included five highways leading out from Indianapolis, and twenty-one others connecting the important cities of the state. The fact that each of these roads was intrusted to a separate set of state commissioners resulted in highly inefficient planning and execution. The salaries of all these commissioners were a large drain on the available funds, roads were laid out where the possible traffic by no means warranted the expense of

construction, and highways were put thru the forests on wet ground that spelled failure from the inception of the plan and that made it necessary for travelers in the spring-time to exercise great care to keep off the road lest they be hopelessly mired. Some roads were, however, of immense importance to the development of the state.

The Michigan Road which ran from Trail Creek on Lake Michigan thru South Bend, Indianapolis, and Greensburg to Madison, 265 miles, was laid out in 1828, and actually completed by 1838. This road was paid for by the sale of lands received by the state from the Federal Government and from the Pottawatima Indians. The state sold the land on the installment plan, and then issued bonds secured by the mortgages on the land, which were given to the contractors in payment for their work. For a time the road was a very important commercial highway, but with the completion of the Wabash and Erie Canal, that reached Lafayette in 1843, its usefulness was considerably diminished.

The National Road was built by the Federal Government, crossing the state from east to west and touching the important cities of Richmond, Indianapolis, and Terre Haute. The famous highway reached Wayne County in 1827 and was slowly extended westward until in 1846 it was overtaken at Vandalia, Illinois, by the railway, and further construction was abandoned. This road, altho not built as well as could have been wished, was, nevertheless, a great path for seekers of homes in the state. Twenty taverns graced its course thru Wayne County alone, and during the forties there was a ceaseless rush of wagons that followed each other so closely that at times not a minute passed without one being in sight. The eastbound traffic, altho not nearly so heavy, was quite respectable, consisting largely of cattle and hogs being driven to markets. In 1848 this road was turned over by the Federal Government to the state, which promptly transferred it to various private companies that were to keep it in repair and to collect the tolls. By the opening of the Civil War most of these companies had abandoned their rights to the highway. In the last decade of the nineteenth century local governments regained control of the road, the last suits coming into the courts in 1906.

One of the reasons that Indiana so promptly abandoned the National Road to private companies was that she had

already had bitter experience with her internal improvements. The state had gone deeply into debt to make the canals and the turnpikes, and the panic of 1837 compelled the abandonment of many projects in all stages of construction and the repudiation of some of the bonds. So unreservedly had the state abandoned its plans that in 1841 a law was passed that allowed any private company to assume ownership and operation of any uncompleted public work, except the Wabash and Erie Canal, on the sole condition that the corporation would finish the undertaking. Road building now became largely a private venture, and during the forties a great many plank road corporations were chartered. These companies built and maintained good thorofares according to the plans which Robert Dale Owen had introduced into Indiana. Deterioration, however, was quite rapid and the companies were forced to adopt gravel which was first legally mentioned as a road material in 1858.

In 1879 came the beginning of the present system of road supervision with the authorization of the control and maintenance of free turnpikes by the county commissioners. Today the roads are under the management of the county or of the municipality. Every township has a Road Supervisor whose duty it is to call out all able-bodied males from twenty-one to fifty years of age for four days' labor on the highways each year. A man may avoid personal exertion by the payment of a dollar and a half for each day's work he owes. The Supervisor superintends the work of these men and hires extra labor if necessary. But the township may not levy a tax exceeding thirty cents per hundred dollars of assessable property for the road work. Beginning with the election in November 1914, each road district, of which a town may not have more than four, is to elect its own Supervisor. These District Supervisors, subject to the direction of the Township Trustee, are to exercise the same functions as did the one Supervisor then serving. The advantage of the law is that, without sacrificing central control, now to be vested in the trustee, it provides for a keener interest in a particular group of roads, and gives opportunity for more definite responsibility. In incorporated towns and cities the streets are entrusted to Street Commissioners or to Boards of Public Works.

The County Highway Superintendent is an officer

created by the General Assembly of 1913, to have general supervision over the roads of the county. He is to appoint Assistant Superintendents not to exceed in number four per hundred miles of county road. These assistants are to inspect all their roads at least once a month and to report their observations, together with the work they have done, for they must keep the roads free from depressions and ruts, well drained, and cleanly ditched. The County Superintendent directs his Assistants, and sets the standard for their work; but he cannot expend more than fifty dollars for the repair of a bridge or a culvert without the approval of the County Commissioners to whom he annually submits an estimate of the cost of maintenance for the coming year. This board has to make all contracts for construction. In counties having less than two hundred miles of gravel or macadam road, the Surveyor may act as the Superintendent of Highways. It is to be hoped that this new adjustment of road supervision in the townships and counties, by providing for some one continually "on the job" in a limited district, will result in more prompt and efficient repairs.

There are several legal processes by which road building or improvement is initiated. It will suffice here to mention one that has been of great value in the improvement of county transportation facilities. On the petition of a majority of the freeholders who must own at least a majority of acres of land within a mile of any public highway in the county, the County Commissioners may order the improvement of the road if investigation by an engineer and three disinterested "viewers" warrants the belief that the cost of the work will be less than the benefit to the land within two miles of the road, but not in an incorporated place. After due notice to the public and hearings of those who oppose the improvement, the contracts may be let. The cost is then assessed upon the holders of the property benefited and may be called for by the superintendent of the construction at a rate not greater than ten per cent per month. However, if the owners of the land prefer, the County Treasurer may issue bonds bearing interest at not more than six per cent payable semi-annually, and the owners may pay their assessments in ten equal annual installments which are large enough to cover the interest on the bonds in addition to the cost of construction. No owner may avail himself of this time privilege unless he waives all

right to contest the validity of the bonds which constitute a lien upon his land until his assessments are all paid.

It frequently seems right that the whole county bear the expense of constructing or improving a road. In this case the County Commissioners may issue bonds to secure the money for the work. These bonds are to be divided into series not less than twenty nor more than forty in number. The bonds of one series are to be due each six months, so that the entire debt will be paid in from ten to twenty years. The outstanding issues of these bonds for roads may not exceed four per cent of the value of the taxable property in the county. Provided the interest rate does not exceed four and one-half per cent, these bonds are exempt from taxation. This method of financing gravel roads has been very popular and has resulted in a large extension of the highway system of the state. In 1910 over twelve hundred miles, and in 1913 over sixteen hundred miles (1,642.33) of gravel roads were constructed, and by July 1914 the state could boast of a total of 26,716 miles that had been improved. In addition to this there were some 37,256 miles that were graveled but unimproved.

There is no doubt but that the present road laws have worked to the material bettering of the highways of the state, but they have also caused a heavy drain upon the taxpayers. The outlay is certainly well worth while when wisely made, but the building of roads has been all too frequently intrusted to careless or unloyal superintendents who have allowed skimping by contractors. The result is that some of the roads have been worn out long before the bonds have been paid off and they have had to be repaired at large expense. It is a question of securing efficiency in making and enforcing contracts that confronts the taxpayer much more than the question of the desirability of road improvements, for it is certain that good highways bring many advantages. Professor W. C. Latta, of Purdue University, has estimated that the difference made in the value of farm products by improving roads amounts on the average to seventy-eight cents per acre every year, simply because of the great saving of time in hauling, which may be done the year around. He holds that a proper betterment of the highways would increase the value of the land in their vicinity about nine dollars an acre. Good roads have, also, a social value, for they enable the farmer to go to town in

any sort of weather; he need not be cooped up on his place several months each year. A Federal report prepared about ten years ago, estimated the expense of hauling crops to the railroad or the town market at over twenty per cent of their farm value; in Indiana this expense averaged over a dollar and a quarter per ton or twenty-eight cents per ton mile. The economic advantages of good roads, if they cut down this hauling cost even a few per cent, are therefore tremendous.

Indiana is well adapted to the construction of highways, for the state is supplied with an abundance of good material; in fact all but nine of the counties have either limestone, or gravel beds. None of these materials is as durable as the basalts or trap rocks found in some states, yet they are cheap and capable of giving, with proper construction and care, a good and a moderately long lived surface.

The problem of the highways in Indiana is, as elsewhere, much complicated by the large number of automobiles. The use of these machines has created a demand on the part of their owners for better roads, and at the same time has occasioned a greater wear on the existing highways. One of the greatest enterprises of those who make their living directly or indirectly from manufacturing, selling, repairing, and outfitting automobiles and from furnishing comforts to those who ride in them is the Lincoln Highway. The project of immediately promoting and procuring "the establishment of a continuous improved highway from the Atlantic to the Pacific, open to lawful traffic of all descriptions without toll charges; and to be of concrete wherever practical" originated in the mind of Carl G. Fisher, of Indianapolis, and was launched in 1911 by a meeting of men most of whom are financially interested in the supplying of automobiles and accessories. The Lincoln Highway Association was incorporated in Michigan to raise ten million dollars by subscriptions to aid the states in building this immense highway, the longest in the world. It enters Indiana from Van Wert, Ohio, and passes thru Fort Wayne, Ligonier, Elkhart, South Bend, Laporte, and Valparaiso into Illinois at Chicago Heights. It is planned to have a feeder, the "Dixie Highway," pass South thru the state from Elkhart on the Lincoln Highway. The significance of these highway movements is that the desire of those rich enough

to afford to seek pleasure in their "machines," plus the business instinct of persons who see large gains from having a host of automobiles pass thru their towns, could in a few years procure immense expenditures of money for the perfecting of one good road from New York to San Francisco. The pleasure, doubtless, is legitimate, the towns along the route will certainly gain trade, probably much less than they expect, but these highways will be of very slight commercial value.

What Indiana really needs is a standardization of road construction and maintenance that will assure honest work by contractors at fair prices. The farmer must have his good roads for hauling, without bankruptcy for the county.

Railways.

At the same time that Indiana as a state was embarking upon her great plans of canal and road building, she began seriously to consider the possibility of the steam railway. As early as 1827 Governor James B. Ray advocated the construction of railways connecting the Great Lakes and the Ohio River. He went further and conceived Indianapolis as the center of radiating lines, with villages every five miles, towns every ten miles, and real cities every twenty miles from the hub. A glance at a railroad map today will show that this vision was in some degree prophetic. Ray, however, was little heeded, until the exhibitions of Joseph Buren, who traveled over the state giving demonstrations of a tiny locomotive pulling a coach that carried live people around a portable track, began to create acute interest in the subject. The next year, 1832, eight railway charters were voted by the General Assembly, and by 1837 thirty corporations had been created to build lines connecting all parts of the state. Altho the companies were in existence, capital was wary. By 1834 the Lawrenceburg and Indianapolis Railroad Company had constructed a mile and a quarter of track near Shelbyville at the cost, all told, of nineteen hundred dollars. On this track a horse pulled a car holding forty persons at the rate of nineteen miles an hour. But the cost of upkeep and operation was unknown, and funds to complete the project were not forthcoming. The state itself, consequently, had to bear the burden of the first commercial experiment with a railroad.

One of the first charters had been that of the Madison and Indianapolis Railroad, but the incorporators had accomplished nothing. "The Mammoth Internal Improvement Bill" signed by Governor Noble 27 January, 1836, authorized the newly created commissioners of internal improvements to construct this road for the state. Two years later the first eight miles were formally opened with a locomotive that had to be borrowed from the Lexington and Ohio Railroad because the one ordered from the Baldwin works in Philadelphia had been lost at sea. After constructing some twenty-eight miles the state leased the road which was eventually completed thru to Indianapolis in 1847, by the company. In 1852 the state sold out its interest, and the road became entirely a private venture.

Private building was so stimulated by this enterprise, that by 1850 there were seven roads with a total of 228 miles of track in the state. In 1854 Indianapolis was the center from which lines ran to Madison, Terre Haute, Lafayette, Peru, and Bellefontaine, while most of the other important cities were reached by connecting lines. Indianapolis had become a real railway center with the first Union Station in the country opened in 1853, thru the efforts of Chauncey Rose, Oliver H. Smith, and John Brough. In this decade the railway expansion was enormous, for in 1860 there had been completed 2,163 miles. Altho the proportionate increase has never since been as large, the building has gone steadily forward until today, with thirty-four operating and eleven terminal companies having over seventy-two hundred miles of main stem and over twelve thousand miles of track, Indiana is one of the best equipped states in the country for the ready marketing of its products. Across the commonwealth from east to west run the great New York Central, Pennsylvania, Baltimore and Ohio, Grand Trunk, and Erie systems, with many feeders and ramifications. These roads give direct and rapid service to the markets of the eastern coast. They, together with numerous other roads, like the Chicago, Indianapolis, and Louisville, the Chicago and Eastern Illinois, the Wabash, and the Chesapeake and Ohio, are so placed as to make direct routes from almost every section of the state to Chicago. From many regions there are lines to St. Louis and to the large cities of Ohio and Kentucky. It is, indeed, fortunate

for the state to be situated on the main lines of trans-continental traffic and to be convenient to large markets.

One of the great contributions of Indiana to the art of railroading has been mentioned. But there is another Hoosier invention as important as the Union Depot, namely the Belt Railroad which was conceived by J. F. Richardson and constructed on the credit of Indianapolis in 1876. This invention results in great economy in the interchange of traffic, and gives manufacturers opportunity to ship from their own spur tracks over any road entering the city. The idea of the belt line has been widely copied thruout the country.

Not all the railroads in Indiana are prosperous, for in 1913, for example, out of thirty-four operating steam railroad companies, only twelve paid dividends. Part of the meagreness of earnings was due to the large outlays necessitated by the floods of that year. Some roads have been built thru territory that is not sufficiently productive to afford dividends at any conceivable freight rates. In still other cases, according to the Public Service Commission, feeders have been sacrificed to the main stem, and opportunities for profitable traffic lost. Finally, earnings have been cut down by the expenses of fighting regulation by the states and the United States. On the whole it may be said that those roads are profitable which connect New York and Philadelphia with Chicago and St. Louis, or which run north and south between important cities. As a state Indiana does not afford very profitable traffic for many railways.

Interurbans.

Railroad men are now wondering whether they will continue to run their trains with steam locomotives or will generate the power at some central plant and distribute it over wires. Altho there had been some experimenting with electricity as a propelling force in 1849 by Farmer and Page, the practical electric motor was not invented until Frank J. Sprague developed the rudiments of the modern system, and began operating cars at Richmond, Virginia, in 1887. This invention spread much more rapidly than that of the steam locomotive, for by 1890 there had been formed two hundred companies operating twelve hundred miles of track. Indiana was not slow to take up with the

new motive power for street railways, and one of her citizens had a notion that he might carry the invention still farther. In 1892 Mr. Charles L. Henry, who was interested in the street railways in Anderson, went south and conceived the idea of connecting Joplin, Carthage, and Webb City, Missouri, by an electric line. He could not secure all the necessary concessions, however, and came back to Indiana determined to test his idea nearer home. Under the terms of a state law which allowed a city railway to extend beyond the corporate limits, providing the County Commissioners consented, Mr. Henry extended his lines until he had connected Anderson and Alexandria, and ran the first thru car on New Year's day in 1898. His project had been delayed by the difficulty of securing capital, owing to the long continued business depression that followed the panic of 1893. This was not the first interurban road in existence, but it seems to have been the first constructed as an electric interurban and it is certain that Mr. Henry coined this useful term.

Even before he had completed the Anderson and Alexandria line, Mr. Henry conceived plans for entering Indianapolis, and for expanding the system until it should include all the lines that the Union Traction Company of Indiana now operates. As early as 1895 he had actually contracted with the Citizens' Street Railway Company of Indianapolis to run his cars over its tracks to some convenient terminus in that city. But he was not the first to complete such connections, for on the first of January, 1900, Joseph I. Irwin, constructor of the Indianapolis, Columbus, and Southern, then the Indianapolis, Greenwood, and Franklin, rode on the first electric interurban to enter the capital.

During the next four years, a period of great industrial prosperity, the construction of interurbans was very rapid and by 1905 nine lines ran out from Indianapolis, and three more were in course of construction. Since then the system has continued to grow at a slower rate, and appears now to have about reached its limits, at least for the time, as very little construction is being attempted. In 1914 the interurban system of Indiana comprised 2,137.25 miles of main stem with 91.65 miles of second track and 89.02 of side track, upon which were operated 1,229 passenger, 363 freight, and 78 mail, baggage, and express cars. The lines centering in Indianapolis are all in the hands of four large companies,

The Fort Wayne and Northern Indiana Traction Company, The Interstate Public Service Company, a subsidiary of the Middle West Utilities Company, The Terre Haute, Indianapolis, and Eastern Traction Company, and The Union Traction Company of Indiana. These holding companies are interested in city street railways and lighting plants as well as in interurbans.

Indianapolis is still the center of interurban operations as thirteen lines radiate from it carrying in and out nineteen thousand passengers daily. One road goes south to Jeffersonville, one goes north to Elkhart, one goes west to Terre Haute, and two reach the eastern border of the state at Richmond and at Union City, while thru Fort Wayne it is again possible to enter Ohio, and from Elkhart one may travel to Chicago. Between these long distance lines are shorter ones joining the capital to such important cities as Greensburg, Connersville, Newcastle, Portland, Wabash, Logansport, Lafayette, Crawfordsville, and Martinsville. These spokes have been connected by lines running between Crawfordsville and Lebanon, Frankfort and Bluffton thru Kokomo and Marion, Lafayette and Fort Wayne thru Delphi, Logansport, Peru, Wabash, and Huntington, and Tipton and Alexandria. These and other routes make considerable interurban sub-centers at Muncie, Bluffton, Fort Wayne, Anderson, Marion, Kokomo, Peru, Logansport, Terre Haute, and Lebanon. In short, a map of the interurban lines in Indiana shows that south of the National Road which is paralleled by a line, there are four or five lines radiating from Indianapolis, but entirely disconnected, while north of that road there are six lines which are for the most part connected by two circumference lines, one running about fifty miles and the other about seventy miles from the center of the circle. There is an independent nucleus at Evansville from which lines emanate to Mt. Vernon, Princeton, Boonville, and Rockport. Finally, there is the line running from Lagrange to Chicago, paralleled from South Bend on west. It seems not beyond the facts to believe that Indiana is better served by electric interurban railways than any other state in the Union or in the world.

The secret of the pre-eminence of Indianapolis as the country's greatest interurban center is not altogether inexplicable. In the first place, the capital is located at the

approximate center of the state and is in a strategic position to be the distributing point for most of the smaller industrial cities and towns, and for the rural communities, except those on Lake Michigan and on the Ohio River. This situation had already made it an important railway center before the invention of the interurban. Second, the topography of the state is such that railway building is a comparatively simple problem. Third, the system has been developed by men of more than ordinary ability, Charles L. Henry, Joseph I. Irwin, Hugh J. McGowan, and others who have not only appreciated the possibilities of traffic development, but who have also contrived to construct the greatest electric terminal building in the country with all that that implies of coöperation with the street railways, and concessions from the state and city government. Finally, the culture of Indiana is in a peculiar way centered in its capital, which is a very attractive spot for the citizens from every district on account of its commercial, social, intellectual, and æsthetic opportunities.

As the peculiar characteristics of the electric interurban railway are largely the basis of its contribution to modern culture, it may be well to note the most important of these traits. E. D. Durand, former Director of the Census, and now a professor in Minnesota University, has defined the interurban as a railway having less than half of its track within municipal limits. If such a road has a length of not less than fifteen miles and a maximum speed of at least twenty miles an hour and lies two-thirds without corporate limits it can be designated a 'fast long interurban.' Since the electric interurban produces its power on a large scale at a central plant, it is very nearly as cheap to operate cars separately as in trains. So it follows that in the middle west cars usually run hourly, locals alternating with expresses, and the service is much more convenient than that of the steam road which finds economy in large engines pulling many coaches, and in running few trains a day. In the second place, the use of a single car with a specially adapted motor makes it possible to accelerate rapidly and thus to combine high speed with frequent stops, another factor which increases convenience. Third, the electric interurban runs on the streets of the cities thru which it passes. This makes for economy of tracks which can often

be shared with a city street railway company, it permits the leaving of passengers at a terminal more accessible to the business center than the ordinary railway station, and it allows passengers to be picked up or dropped at many convenient points along the way but it does prohibit speed while within the corporate limits. The first interurban railways made the mistake of placing their tracks upon public highways, thinking thereby to save expense in building the road-bed. It has since been discovered that a private right of way is far better because it often shortens the distance, avoids dangerous curves and disadvantageous grades, and allows extra speed; the cost of the purchase of land is somewhat counterbalanced by the decreased tax for highway maintenance and by the lessened liability to accidents. Fourth, the light electric car is better adapted to climbing grades than the heavy steam train, and, consequently, the interurbans can reach places commercially inaccessible to the steam roads. Moreover, this fact makes it possible for the interurban to take more direct routes between towns than the steam railways. Fifth, the electric cars are free from smoke and so more pleasant to travelers, especially during the summer when windows are open wide. The sixth characteristic is a result of the others: the electric interurban can carry passengers for short distances more cheaply than can the steam railway.

As a consequence of these peculiarities, the electric interurban has found that its business has been largely the carrying of passengers, and more especially of passengers who desire to ride less than fifty miles; for beyond that limit the superior comfort and speed of the steam railway coaches cannot usually be overcome. Yet, even for such long trips as those from Indianapolis to Richmond and Terre Haute, the convenience of the interurban schedule wins many passengers, and there are actually men who ride to business in the capital city every day from points forty miles distant. It is possible that the future will see a considerable increase of this commutation traffic, which is even now large. One part of this commutation traffic is composed of school children who find the interurban a key to better high school facilities. The possibility of commuting has permitted many people who work in the cities to live in the suburbs, and has resulted in building up these smaller towns and in increasing the land values. In fact there is no doubt but that the sell-

ing value of real estate all along the line of every interurban in the commonwealth has been increased. Farm land back for two or three miles often appreciates from fifteen to twenty dollars an acre. This is for two reasons. In the first place, if there is an accidental or imperative need for some farm supplies, it is possible to telephone to the city and to have the materials arrive on the next car. Second, the farm is more accessible; a trip to the neighboring small town or to a large city can easily be made without the trouble and loss of time in driving, and the pleasure and shopping facilities of the city are available. Indeed, the traffic for shopping and pleasure in the cities constitutes a large part of the passenger patronage of the interurbans. The fact that cars stop at every crossroad makes such a trip feasible for many persons who could not easily reach the station of a steam railroad.

This shopping traffic has been very profitable to the greater municipalities. Altho it is impossible to say just how largely the interurban has contributed to the growth of business in cities like Indianapolis, it has certainly been an important factor. Storekeepers in the smaller towns have observed this, and have at times bitterly inveighed against the new and popular form of transportation. It is doubtful, however, whether the interurban has not helped the small city more than it has injured such a municipality, for it has permitted the farmer to live in town and to commute to his farm, it has allowed the merchant to conduct his business on a smaller stock in the knowledge that he can telephone an order to a jobber and supply any demand in a very few hours, and finally, it has enabled people to find endurable the life in the small place which would otherwise be unbearable. Another factor is often forgotten; in these days of increasing variety of wants, it is impossible for a store in the small town to keep on hand an adequate stock. People absolutely demand the privilege of choosing from large assortments. It therefore seems probable that the interurban has been instrumental in turning to the large city store, where goods can actually be seen, the patronage that would naturally drift from the small town shop to the great mail order house. In the last analysis, however, if the interurban has injured the merchant in the small town by giving his quondam customers the opportunity of buying at better advantage, the

customer whose welfare is the merchant's sole excuse for existence, has gained, and good has been accomplished.

The interurbans have imitated the steam railways in the attempt to stimulate excursion traffic by offering very low rates for limited return tickets to various points within and without Indiana. For instance, special Sunday rates have sometimes been granted, and trips have been planned to points in Ohio, in Kentucky, or to Niagara Falls. Just how much the passenger business of the electric lines has injured the steam roads is difficult to say. Some well informed men advance the theory that the interurban stimulates the desire for travel, and that the steam railways profit by an increase in long distance traveling, and by the action of the electrics as feeders. This theory is bolstered up by the fact that the average length of a passenger ride on the steam roads is increasing. It is, however, certain that the interurbans have won much of the short distance traffic from the steam lines which they parallel, and this in itself is sufficient to account for some increase in the average length of trips. If the interurbans have helped the steam roads at all it has not been thru the passenger department, save in exceptional instances, but thru a stimulation of freight business resulting from a raised standard of living in the small communities.

One of the striking peculiarities of the passenger business of the interurban is the fact that it has fairly definite limits. Within a year after an electric line has been completed, the passenger use of its facilities is ordinarily at its maximum except for the gradual growth with the increase of population. This phenomenon has been one of the unexpected factors that have disappointed the owners of interurbans.

The competition with the steam roads in transporting passengers made it necessary for the interurbans to carry the baggage of their patrons. This resulted in the fitting up of baggage compartments, which were seldom full; so it was possible to give some room to express companies which now operate over the lines of the interurbans. The majority of the commodities carried on these lines, however, are technically small package freight, merchandise received at one station and delivered at another depot. Altho some interurban lines have succeeded in building up a large freight business, the field has been quite limited. In the first place, the

interurbans have had difficulty in arranging with the steam roads for the interchange of traffic. Again, the interurbans are not extensive enough to accept freight for delivery at any great distance if they have to depend upon their own equipment. Third, the steam roads have so long a start, men are so in the habit of shipping their produce by them, that it is hard for the interurbans to secure a large place in this field. Finally, the rates on the steam roads can be made so low on carload shipments that it is impossible for the electric lines to underbid them, most of the plants that ship by the carload having been built with spurs for the steam railroad connection. Doubtless time will witness the overcoming of these difficulties in some measure, but as yet the way is not clear for the gaining of much more than the small package business for prompt delivery. One field that the interurbans running into Indianapolis have developed from the beginning is the carriage of milk. Thousands of gallons are daily brought into the city for distribution. This has not only improved the milk supply, but it has been of large benefit to the farmers along the routes so served.

The passenger and freight business has been supplemented by other services rendered by the interurban roads. The Indianapolis and Cincinnati line, for example, is supplying current for light and power in ten towns on or near its route. This service can be rendered at less cost than would be necessitated by the installation of a local plant, and is a real benefit to the town as well as a profitable enterprise for the company. So the coming of the interurban has been of immense importance to Indiana. It has meant in some cases the improvement of municipal public utilities; it has taught people to travel more frequently, and thus to broaden their horizons; it has brought the stores and pleasures of the large city within reach of the country; it has enabled the farmer to save time in his trips to town and in replacing broken machine parts or in securing needed supplies; it has built up the business of the large municipalities, and has made it possible for folks to live in the suburbs, altho employed in the cities; it has created new business, exemplified in the supplying of milk to Indianapolis; at the expense of some few storekeepers, it has made life in the small town and on the farm more worth while; it has aided in the prompt dissemination of information thru the distribution of newspapers direct from the cars; and it has raised real estate

values in town and country. In short, unmeasurable as are the benefits of the interurban, they have been great.

Altho the interurbans are popular and important, they are not, as a whole, considered financially successful. From the standpoint of the traveling public, their rates are reasonable enough, but they are not sufficiently remunerative to suit the stockholders. Of the thirty-six companies owning electric railways in Indiana in the year ending 30 April, 1914, but nine paid any dividends on either common or preferred stock. The combined net income of the twenty companies that more than made expenses was \$1,667,944.42 and the net loss of the other eight aggregated \$269,460.38. The reason for this poor financial showing is partly known. In the first place, the roads are overcapitalized. On the thirtieth of June 1913, there were outstanding stocks with a par value of \$109,217,285.67 and bonds for \$93,010,047.34. The cost of constructing these roads has been variously estimated, but it would probably average not over forty thousand dollars per mile of line completely equipped. At this maximum cost they could certainly be replaced for less than \$110,000,000; the Public Service Commission believes that they could be duplicated for the amount of their bonded indebtedness. Certain it is that the total outstanding capital is in par value about twice the actual cost of the roads. The Public Service Commission has compiled data from the reports of these companies that show for the same year total revenues of \$15,090,417.40 and total operating expenses, including taxes, of \$8,972,020.31. The difference is \$6,118,397.09, which is enough to pay five per cent on the bonds, approximately \$4,651,000, and over eight and a half per cent on \$17,000,000, the difference between the maximum possible cost and the par value of the bonds. Or, from another standpoint, this \$6,118,000 is over five and six-tenths per cent on \$110,000,000. So analysis proves that, on the whole, the interurbans are paying a fair rate of interest on the actual money invested, but they are not sufficiently profitable to give such returns on the water in stock as the owners most ardently desire. It is probably true that the rises in the wages of the employees, the constantly increasing necessity of rendering high class service, the ever higher cost of supplies, and the demands of the people for detailed reports to the Public Service Commission do account for the fact that the expected dividends cannot be earned. There are doubtless other

minor elements, such as the increased use of automobiles and the cutting down of travel due to the dull times that came with the great European war. The financial situation may be summarized in the statement that altho the interurbans are earning fair returns on the actual investment, the profits are hardly large enough to tempt capital into further expansion of the system.

Summary.

Altho the rivers were for a long time important means of communication in Indiana, and in fact the only highways of trade, and altho the state undertook an extensive system of canals which actually did contribute materially to the development of the commonwealth, at present water communication is confined to Lake Michigan and a small use of the Ohio River. The need for communication led to the attempt of the state to build so many roads at the same time that the task was impossible, and what had not been shabbily finished had to be abandoned. Some of the early roads, however, were of great importance to the commercial life of the state. The present system of road supervision has resulted in a large expansion of gravel roads, and it appears to be to the interest of the commonwealth to improve these highways in order to lessen the cost of farm hauling and to improve social conditions; but the chances of skimping work by contractors must be minimized. As capital was for a long time slow to venture into the field of railway building, the state constructed the first steam road. From the time when the commonwealth proved the utility of the new invention, corporations began creating a system that now gives Indiana excellent service. A large part of the excellence of the railway facilities in Indiana is due to the fact that the main routes from the Atlantic seaboard to Chicago and St. Louis pass thru the state. The development of the interurban railway has been spontaneous in Indiana, and has made plausible the claim that the state has the best system of inter-city electric communication in the world. This modern agent of transportation has done a great deal to stimulate travel, and to aid the progress of business and culture.

CHAPTER VI.

Labor

In the United States it is a highly respectable and proper thing to work. Ninety-six and seven-tenths per cent of the males between the ages of twenty-one and forty-four professed, at the last census, to be "engaged in gainful occupation." Indiana is no exception; indeed, it is a remarkable fact that exactly the same proportion of males of these years of maximum productive power are in gainful pursuits in Indiana, in the East North Central States as a group, and in the United States as a whole. There are, however, some respects in which Indiana varies from the other commonwealths in her section. An inspection of the following figures will show some of these striking points of difference:

Proportion of Total Population Engaged in Gainful Occupations in 1910 By Age and Sex.

AGE	INDIANA		EAST NORTH CENTRAL STATES		UNITED STATES	
	Males	Females	Males	Females	Males	Females
10 years to 13 years.....	7.9	0.8	4.7	0.6	16.6	8.0
14 years to 15 years.....	37.8	10.3	29.6	11.6	41.4	19.8
16 years to 20 years.....	77.2	27.3	77.7	38.1	79.2	39.9
21 years to 44 years.....	96.7	17.5	96.7	21.1	96.7	26.3
45 years and over.....	83.0	10.4	83.0	11.0	85.9	15.7
All ages over 9.....	79.5	14.8	79.4	18.2	81.3	23.4

In the first place, this table shows a great deal less child labor proportionately in Indiana than in the United States as a whole; yet there was a considerably larger proportion of boys under sixteen years of age employed in Indiana than in the East North Central States. This was true despite the long existence of a law prohibiting the labor of children under fourteen in manufacturing, mining, stores, laundries, bakeries, and some other forms of business, and providing that no child under sixteen might work in these lines unless he were physically fit and could read and write.

In the second place, Indiana was typical in that the age period at which women entered most largely into industry was between the sixteenth and twenty-first birthdays. However, a smaller per cent of the women of every stage of maturity beyond thirteen years were employed in the Hoosier commonwealth than in the section or in the country. This variation is not easily explained. Perhaps it is partly attributable to the fact that the mining regions offer little employment to women and that many women and girls whose homes are on the farms are not classed among the wage earners. That Indiana is more closely devoted to agriculture than the surrounding states appears in the table which follows. It would be hard for the farmer's wife to find any wage earning occupation even if her arduous duties gave her time to leave home to earn money.

BRANCH OF INDUSTRY	INDIANA				EAST NORTH CENTRAL STATES		UNITED STATES	
	NUMBERS		Per Cent		PER CENT.		PER CENT	
	Males	Females	Males	Females	Males	Females	Males	Females
Agriculture, Forestry, Animal Husbandry	335,609	8,845	38.1	5.7	30.1	4.7	36.1	22.4
Extraction of Minerals	24,293	7	2.8	---	3.2	---	3.2	---
Manufacturing and Mechanical Pursuits	271,315	39,087	30.8	25.1	34.6	26.6	29.4	22.5
Transportation	71,810	3,901	8.2	2.5	8.8	2.2	8.4	1.3
Trade	87,043	12,633	9.9	8.1	11.0	8.9	10.5	5.8
Public Service (except Teaching)	10,028	340	1.1	0.2	1.3	0.2	1.5	0.2
Professional Service	28,855	19,922	3.3	12.8	3.2	12.3	3.1	9.1
Domestic and Personal Service	28,355	56,097	3.2	36.0	3.9	33.8	4.1	31.3
Clerical Occupations	23,671	14,899	2.7	9.6	4.1	11.3	3.8	7.3
Totals	880,979	155,731						

This table is interesting because of what it shows of the development of Indiana. The one striking fact is the normality of the Hoosier working force. The United States may be considered a self-sufficient nation. Her foreign trade is very small compared to the great volume of her industry. Since, therefore, the men in Indiana and in the nation are distributed among the various occupation groups in approximately the same proportions, it is entirely safe to say that the commonwealth has attained to a development very closely adapted to this stage in the world's industrial history. Were it not for the fact that one-third of the employed negro women of the South are farm laborers, the distribution of women among the great groups of industries

in Indiana would be nearly as typical as that of the men. Another particularly interesting thing to note in this table is that a smaller proportion of the men are engaged in trade and transportation in Indiana than in the East North Central States, or in the United States. This leaves a larger proportion for the direct creation of goods. While it is undeniable that the men employed in trade and transportation are as productive in their labor as are any other men, it is yet highly desirable to minimize efforts spent in exchange in order that less of productive processes should consist of carrying things from place to place, and more in changing the shapes and combinations of materials. This statement should not be misconstrued. It is truly wonderful for a state to have reached the point where less than seventy-two per cent of its men are necessary to farm, mine, and manufacture, while eighteen per cent are usefully employed carrying good things from the place where they are put together to the place where they are to satisfy the needs of other men. Of course, Indiana is a vital element in the exchanges of the nation, but in the main, the people employed in transportation in the state are carrying commodities to or from Hoosiers.

Per Cents of Persons Gainfully Employed in Creation and Exchange.

	INDIANA		EAST NORTH CENTRAL STATES		UNITED STATES	
	Males	Females	Males	Females	Males	Females
Agriculture, forestry, animal husbandry, extraction of minerals, manufacturing, and mechanical pursuits-----	71.7	30.8	67.9	31.3	68.7	44.9
Trade and Transportation-----	18.1	10.6	19.8	11.1	18.9	7.1

Women Wage Earners.

There has recently been an investigation that penetrated directly into the situation of the Indiana laborer. The 1913 General Assembly provided for a non-salaried Commission of five members to investigate women's hours for working, and their wages, and voted two thousand dollars to finance this stupendous task. As the funds were absolutely inadequate to any accomplishment, the commis-

sion wisely requested the coöperation of the Federal Department of Labor, and confined its own activities to holding hearings in ten cities and to sending a questionnaire to employers of labor in thirty-eight different industries. Altho Mrs. Bertha J. Lockwood literally worked herself to death on this commission's task the Federal report is the only result of the work that is worth attention. The Commission itself noted a "general and increasing tendency upon the part of nearly all Indiana employers towards the reduction of hours and the improvement of work conditions as to sanitation, ventilation, safety, etc., a disposition which is undoubtedly born of a realization that such things are truly economical, promote efficiency of the workers, and insure a more permanent and contented working force. * * * This Commission has not found any prevailing pressing conditions that would seem to justify any radical legislation on the subject." Nevertheless, the Commission felt that there is a "thotless and unprincipled minority" of employers who actually do need the compulsion of further laws. Therefore it was recommended that the General Assembly provide by more stringent statutes for the personal safety of employees from accidental injuries and from occupational diseases; for adequate toilet conveniences, and "such supervision as will insure the physical relaxation and welfare of women workers;" and for a restriction of women's work hours to fifty-four a week in mercantile establishments, and fifty-eight in factories, with a possibility of overtime in certain industries which, like canning, have a short rush season. None of these proposals has as yet been adopted. The fact that they were embodied in the report shows, however, that there actually do exist in the state certain work conditions that are detrimental to the highest well-being of the women wage earners.

The Federal report is much more satisfying, for with the thoroness that characterizes all of its investigations the United States Department of Labor has tabulated a large number of important statistics. Personal interviews with employees in stores and garment factories, and inspections of the pay rolls in Indianapolis, Evansville, Fort Wayne, Hammond, Lafayette, Muncie, New Albany, Richmond, South Bend, and Terre Haute were the basis of all conclusions. In normal times the hours of a little over two-fifths of the women employed in the stores were more than

forty-eight but fewer than fifty-five per week; nearly fifty-five per cent worked fifty-five but fewer than sixty hours. During the Christmas rush nine-tenths labored at least sixty hours per week and two-thirds sixty-five hours or more. It is evident, therefore, that a large proportion of the store women in 1914 had to work at least nine hours a day. To call the Christmas rush season "barbarous" is to express the thot mildly. The women working in the garment trades were, on the whole, a little better off as far as hours were concerned, working an average of about forty-eight hours per week, altho in this industry a full time week was about fifty-three hours.

Over seven-eighths of the garment workers, and nearly seven-tenths of the women employed in stores were idle at least part of the year. One-sixth of the unemployment among the store girls was due to voluntary vacation as was also one-ninth among the garment makers. The rest of this unemployment, amounting to over an eighth of the entire working time of the mercantile employees, and to nearly a sixth of the aggregate working time of the garment workers was involuntary. The figures show, then, that there is a large fraction of the possible working time of the women of Indiana wasted. The problem of unemployment is acute in the Hoosier cities.

Two other interesting facts were developed. The girls who worked in the stores invariably reported that the legally required number of seats were provided. "It should be said, however, that there was frequent complaint among the women, that these seats could not be used, even in 'slack minutes' without incurring the displeasure of the management." If these girls have to maintain the standing position which, when held all day long, is so conducive to varicose veins and to over-fatigue, the garment workers also have their trouble, for most of them sit at power driven machines, which require slight but constant bending of the operatives' backs.

Perhaps more important than any of the other matters is remuneration. The average age of the women in the mercantile establishments was about twenty-four years, and their mean weekly wages \$7.82; one-half earned less than \$6.78. The Indiana Commission's questionnaire elicited replies from the employers of nearly seven thousand women in thirty-three other industries. The average weekly wage

of these women was \$7.19. Since it is almost invariably the fact that more than one-half of a given group of wage earners receive less than the average wage, it is entirely safe to say that over one-half of the women employed in the stores and factories of Indiana are not earning as much as \$7.25 per week. There have been of late a number of state commissions investigating the cost of living. The lowest that a minimum wage has been set in any state appears to be \$7.50, and the weekly income usually deemed necessary to provide the requisites of an efficient existence is eight or nine dollars. Of course these determinations fit conditions in other commonwealths, yet prices in Indiana do not seem to be essentially different from those elsewhere in the country, and it is within the bounds of reason to believe that fully half the employed women of Indiana earn wages insufficient to support them adequately.

Labor Organization.

Altho there is little reliable information concerning the actual living conditions of the laborers in Indiana, it is possible to learn something of what they are doing to help themselves. Having discovered that many of its "friends" are either constitutionally incapable of understanding its problems, or else are posing, labor has for some time adhered to the principle that it must work out its own salvation with courage and determination.

Except in the case of a number of precarious English organizations it has seemed impossible for farm hands to conduct successful unions; their employment is too irregular, their opportunities for intercourse too scant, and their ambition to become owners too strong to permit them to develop enthusiasm for organizations that look to improving their lot as employees. Men in the public service, in professional work, in clerical occupations, and in domestic and personal service generally find organization unnecessary or distasteful, or they themselves, may be incompetent. The great opening for the labor unions is, therefore, among the persons employed in the extraction of minerals, in manufacturing and mechanical pursuits, and in transportation and trade. Of course every other group presents exceptional occupations, but it is certain that these four are most readily susceptible to unionization. In Indiana in 1910 about four hundred fifty thousand men and fifty-five thousand women, over one-half of the men and more than one-

third of the women who worked for gain were engaged in these occupations. A large proportion of these people are members of labor unions, but the number cannot be accurately stated. There are at present locals embracing a membership of over fifty thousand affiliated with the Indiana State Federation of Labor, and there may be as many more individuals connected with unaffiliated unions. At a maximum, then, one-fifth of the eligible workers are in the unions. This number may not seem large, for there are vast fields which for some reason or other the unions cannot yet occupy, for instance the employees of the Illinois Steel Company at Gary are uncombined; but on the whole labor in the commonwealth of Indiana is pretty extensively organized.

The "locals" of the trade unions are largely of two types; those that are members of a national or international body, and those that are independent. An independent local is able to exercise over the men powers unlimited except by law and by its own members, but it is weak in that it has to fight its battles unaided. The affiliated local loses much of its self-sufficiency, for it cannot strike without the sanction of the national or international officers of the craft; but it also gains much, for it can summon the assistance of the general officers in its negotiations with employers, and if a strike is ordered, it can be assured that no other men of the same international union will act as strike breakers. In addition, the affiliated union can rely upon the financial backing of its "international," which provides strike benefits. The amalgamated unions, moreover, sometimes provide benefits for their members who are out of work or are sick. Thus the national bodies have developed, in some cases, an elaborate system of insurance that extends even to the protection of life. The local unions have another function. They maintain headquarters that serve as club rooms and centers of social life for the members, and, as clearing houses of information about available jobs and unfair employers. Finally, the meetings of the locals really do afford the members training in parliamentary law, and in thinking, for, in discussing the common business, a man who wants to carry conviction must be sane.

The American Federation of Labor requires the locals of affiliated nationals and internationals to belong to what are known as the Central Labor Unions, delegate bodies representing the organizations of the different trades in a

given city. The work of these central labor unions, which are located in all the important municipalities of Indiana is to secure coöperation between all the workingmen in the given city. If one union is in trouble of any kind the "Central" can give moral support which is of great value. For instance, when the street railway employees in Evansville struck, the Central Labor Union effectively prevented laboring men from using the cars. Thru these bodies contributions may be secured to aid striking unionists, formal or informal boycotts may be arranged, sympathetic strikes may be initiated, and employers may be influenced. There is another class of combination in the city that may be illustrated by the Building Trades Council, which aims to secure complete coöperation between the men of all the trades that work on the buildings.

The Indiana State Federation of Labor was founded in Indianapolis in 1885 by delegates from the Alpha and Armstrong Assemblies of Knights of Labor, a Molders' Union, Typographical Union No. 1, and Cigar Makers' Union No. 33. It is the oldest state federation of continuous existence, and has served as a model for some of the later combinations. Its aim and function is set forth in its Platform and Principles in this way:

"From the fact that local trades unions and labor organizations are largely hemmed in by their special interests, finding their opportunity for work outside the business incident to their particular callings, it is important and necessary that the Indiana State Federation of Labor should seek to mold and influence public opinion on economical reform, to lend its aid in the carrying forward of educational work and to secure legislative enactments tending to the benefit of labor. To the end that all labor work may be carried forward effectively and systematically, there should be a compact federation of labor organizations along the line of affiliated trades and the cultivation of a fraternal feeling among all labor organizations, with the aid of a general federation and coöperation. The Indiana State Federation of Labor therefore aims to secure such organization of labor thruout the state as will aid in bringing about these results."

At its annual convention the Federation elects an Executive Committee of five members including the President and Secretary-Treasurer. This Executive Committee is also the Legislative Committee, and spends most of its energy during the sessions of the General Assembly trying to se-

cure the enactment of laws favorable to the interests of labor, and to prevent the passage of detrimental measures. Many times it has failed to accomplish much because its efforts have been dissipated in advocating a large number of bills, and yet it has succeeded remarkably in a great many of its undertakings. This committee, however, does not confine its attention absolutely to the General Assembly, but assists in procuring subscriptions to aid striking workers all over the continent, and its individual members frequently furnish very able counsel in settling labor troubles.

The State Federation defines its position by passing resolutions at its annual convention. These resolutions may in general be classified as follows:

1. Resolutions demanding certain legislation, such as the minimum wage, old age insurance, workmen's compensation, the forbidding of the importation into the state of men for police duty, restriction of the working hours of women and children, free school textbooks, etc.
2. Resolutions condemning or approving the work of state officers or commissions, such as that adopted in 1914 declaring the work of the state commission appointed to investigate the hours and wages of women to be a farce.
3. Resolutions approving the work of the officers of the State Federation, or instructing them concerning their activities.
4. Resolutions of sympathy with strikers, with labor people in trouble or bereavement, with the actions of labor bodies, with the use of the various Union Labels.
5. Resolutions of actual legislative force, as those governing the membership fees, that of 1914 making the "Lafayette Labor News" the official organ of the Federation, and that making it necessary for every delegate to wear at least three articles bearing the union label.

These resolutions are important as an aid in educating the delegates and in crystallizing sentiment. So this State Federation is a powerful factor in formulating legislation, and in molding public opinion. Altho it may not definitely endorse any political party, it at times determines what candidates are sent to the Assembly and to Congress. Its weakness lies in its lack of funds. It would seem to be the body best adapted to organize the laborers of small towns into federal unions including workers at all the trades, but it cannot afford to support a man to do the work.

Labor Troubles.

Altho he frankly recognizes the truth that "the labor movement is a rough struggle," the trade unionist does not like to strike except as a last resort. Occasionally strikes grow out of absolutely silly misunderstandings, and yet, on the whole, these resorts to force are based on real grievances. For over a decade Indiana had a State Labor Commission of two men who were under obligation to do all in their power to settle labor disputes. During the last four years of its existence, 1907, 1908, 1909, and 1910, this Commission took cognizance of fifty-four strikes. Doubtless there were many strikes that did not come to its attention, but certainly all of the larger ones did. In these fifty-four strikes fewer than fifty thousand men were involved. Even this figure exaggerates the magnitude of the troubles, for two of the strikes which were of very brief duration were conducted by the United Mine Workers of America; one of them involved ten thousand and the other fifteen thousand men. A third strike of five thousand employees of the Republic Iron and Steel Company, also short, was fought for the sake of one hundred organized foreign employees who struck for a small wage advance. Still another strike, involving seventy-eight hundred men most of whom were not Hoosiers at all, was called in the summer of 1908 by the employees of the Lake Carriers' Association, a combination of companies owning the steamers on the Great Lakes. Of four large strikes including over thirty-seven thousand men, three were brief and easily settled, and the fourth touched Indiana slightly, compared to the other states, New York, Ohio, Michigan, and Illinois. Counting in, however, the participants of these four large strikes, four years saw only one-tenth of the men capable of organization on strike, an average of one-fortieth per year. Twenty-six of these fifty-four strikes, including the three large ones that affected only Indiana, were concluded in two weeks time or less, and several of the others lasted in the acute stage but a few days, altho some of the employers held out longer than the main body. So the actual loss of working time from strikes is comparatively very small.

The results of strikes are always more or less hard to determine, as the issues frequently become so involved that a statistical statement of the effects is impossible. The fol-

lowing figures, however, may be of interest as showing the kinds of demands that have been presented by the trade unions to their employers, and the success that has attended their course:

Results of Strikes in Indiana in the Years 1907, 1908, 1909, and 1910.

	Men Won	Men Lost	Compromise	Doubtful	TOTALS
All Strikes-----	10	16	24	4	54
Individual Demands—					
Increased Pay -----	7	4	16	2	29
Recognition of the Union--	--	3	--	--	3
Shorter Hours --	4	1	7	--	12
Closed Shop -----	3	2	--	--	5
Other Demands*-----	1	8	9	4	22

(*Includes reinstatement of discharged employees, shop rules, sympathetic strikes, etc.)

It appears that the men most frequently strike for increased wages, and that these demands are generally in some measure successful, for a compromise on the matter of pay means in every case a gain to the men over the previous rate. In their demands for shorter hours the strikers have likewise been successful as a rule. The closed shop, however, having been already largely won in many trades where it is most easily enforced, is today hard to gain. Recognition of the union is one of the concessions that employers most grudgingly grant because it means eventual ability of the men to enforce their demands just as fast as business warrants improved working conditions; the employer knows well that he can hold his men down better if he treats with them as individuals. Out of a total of seventy-one demands made by the men in these strikes they completely lost only eighteen or about one-fourth, while six others were doubtful. Some measure of success was therefore attained on two-thirds of the points at issue and in three-fifths of the strikes.

There is a general impression that it is the usual thing for a strike to be accompanied by violence or rioting. This notion is particularly prevalent since the great street car and teamsters' strikes in Indianapolis in 1913. There is little doubt, however, but that a moderately efficient use of

the police force would have prevented any excessive amount of violence at that time. Indeed, it is surprising how little physical violence there actually is. Among the fifty-four strikes reported during the last four years of the existence of the Labor Commission, rioting and bloodshed was noted in but four cases, and the settlements were notably friendly in many. For instance, when, in the summer of 1907 eight hundred employees of the Union Chair Company of Tell City were out, it was feared that there would be serious trouble, and the militia was sent for; the troops were met by the strikers with a brass band and were royally entertained by the people of the city. That same year when the five hundred employees of the Penn American Glass Company of Anderson struck over a misunderstanding as to the time of making payments, they did not walk right out, but stayed to take care of their tools and machinery. In short, the laboring man is a human specimen; if force appears to be the only or even the best means of gaining an end which he honestly believes just, he will no more hesitate to employ force than did the patriots of England, France, or the American colonies who appealed to "the sacred right of revolution" against intolerable government. But the laboring man has found that violence does not, on the whole, pay, and he now largely refrains. The position of a number of the best labor leaders may be illustrated by the words of Charles Fox, in his presidential address to the Indiana State Federation of Labor in its 1914 convention at Fort Wayne:

"Many more disturbances of smaller proportions have occurred all over the state, and in all these conflicts employers have used that old, time-worn custom of hiring degenerates to create disturbances, and then hollo that it was the men on strike who were responsible, but I am glad to note that the public are refusing to be fooled by this old cry and are beginning to see who are the real disturbers of the peace of the communities."

Summary.

The facts presented in this chapter are not as complete as would be desirable, but they are sufficient to warrant some conclusions. In the first place, there is too much child labor in Indiana, even yet, altho the distribution of the labor force among the industrial groups is quite normal and healthy. In the second place, a large proportion of women

wage earners are employed at wages that are insufficient to keep them efficiently alive; they are forced to work outrageous hours at the holiday season in the stores, and are subject to some physically injurious conditions, such as bad positions while at work and unnecessary standing. Third, labor is comparatively well organized in the commonwealth in local trade unions connected with their trade national or international bodies, and brought together for coöperation in city centrals and in the State Federation. Yet there is a large field still unoccupied by the unions. Fourth, altho the laboring men much prefer to settle their differences with their employers by negotiations, they are sometimes driven to strike, but, on the whole, these strikes do not seriously interfere with business as they are generally brief and are seldom characterized by violence. In more than a majority of instances the men gain some concession by striking.

On the whole, labor conditions in Indiana are good.

CHAPTER VII.

Labor Legislation

"Thank God, the legislature won't meet again for two years" is a sentiment more often felt than expressed. Yet the legislature is not altogether bad; indeed, it has served labor many a good turn. It seems, perhaps, curious that such a self-reliant people as the Americans should so cram full the statute books as to gain a leading place in the world for bulkiness of laws, and that Edgar A. Perkins, in his presidential report to the Indiana State Federation of Labor, should assert in one breath that labor must fight its battles unaided, and in the next that the legislative committee must be more active and have more coöperation.* The explanation of this apparent contradiction seems to be that the American passion for law making is a result of this self-reliance. Each individual wants to win his own life struggle. A group of men in related pursuits feel that certain conditions, which might be created by statute, would help them. In order to secure the necessary law this group must consult with a second, must grant aid to it. And so groups combine to secure laws, laws that, considered separately, interest only a small per cent of the legislators or of the public. To find illustration one need only recall the main charge against the 1816 Constitution, that it permitted special laws on any subject, and to look at the many laws of 1915 that in no way interest the majority of citizens. Viewed in this light, bulky statute books may be considered a characteristic product of the American spirit of independence.

It is not surprising, then, to find that the legislatures of Indiana have placed upon the statute books a large number of laws that are of vital interest to labor. The develop-

*Proceedings of the Ind. State Fed. Lab. 1909, pp 16 and 17.

ment of this code has been without system; concessions have been gained wherever possible, for the workingmen have had to contend with forces rich in resources of money, of intellect, and of prejudice. Moreover, these forces have been firmly united in their opposition to labor. For instance, since the passage of a federal statute in 1908, the railways doing interstate business would not be directly affected by a state workmen's compensation law; yet they have maintained a lobby against such an enactment on the ground that their welfare depended on the welfare of industry, and that workmen's compensation laws would injure them by driving factories out of the state. Against these powerful and united foes labor has won its victories with much difficulty, but with a certainty of ultimate triumph.

Since these circumstances make it equally difficult to present the subject of Indiana's labor legislation as a chronological development and as a code, an attempt will be made to point out the significance of the more important provisions of the various laws.

Children.

In the first place, there are a number of laws for the special benefit of children. For over a score of years children under fifteen have been forbidden to engage in acrobatics, in callings hazardous to life or limb, or in businesses dangerous to morals such as those connected with dance halls, theatres, saloons, prostitution, and obscene actions. Fines were to be assessed upon the adult responsible for any child caught violating these laws. In 1911 after the bitterest fight of the session a somewhat emasculated child labor bill was carried. Today no child under fourteen years may be employed for wages, except in agriculture and except that children from twelve to fourteen may work in canning factories from the first of June to the first of October. No child under sixteen may work more than forty-eight hours per week, or more than eight hours per day, except that, on the written consent of the parent or guardian, the child may work nine hours a day or fifty-four hours per week. To guard against night work, this labor must be performed between seven A. M. and six P. M. Moreover, no child aged fourteen but under sixteen may be employed during school hours without a work certificate which cannot be issued

legally unless the child shows a small degree of physical and mental advance. The child, however, is not to be idle, for all children from the ages of seven to fourteen must attend school, and all under sixteen must attend unless regularly employed during school hours. In this way, the enforcement of the age provisions of the child labor laws is made less difficult. Finally, the list of occupations forbidden to children has been extended to include employment in tobacco factories, in breweries or distilleries, in making matches or explosives, and in work about certain classes of dangerous machinery.

By this legislation of 1911 Indiana was not placed in the forefront of the states that care for their children. There is no good reason for allowing children to work in canning factories but not elsewhere, there is no logical justification for allowing children of very young age to do farm work for wages, and the age limit for entering dangerous trades might well be eighteen rather than sixteen; even adults are prone to carelessness—young people do not, as a rule, realize danger enough to appreciate the need of being careful. Indiana is, then, behind the best commonwealths in child labor legislation but has risen from her former very backward position.

Protection of Women.

American courts have frequently placed women in a position midway between children and men, a place that is, in a fashion, accorded them in the labor laws of Indiana. Women are not allowed to work between the hours of ten P. M. and six A. M. in the factories. No female may be allowed to work underground in a mine, and the women in the stores must be provided with seats which they must be permitted to occupy when not serving customers. The enforcement of this seat law is certainly a farce, for it has become part of the floorwalker's business to find active work for any saleslady whom he detects sitting.

In the regulation of the labor of women as well as of children the Indiana law is weak. For instance, there ought to be a limitation of the weekly working time of women to fifty-four hours, not more than nine hours to be in any one day, unless that period is exceeded five days to make possible a half holiday the sixth. Exceptions might be made for periods of great industrial pressure; yet the allowance

of overtime should be carefully prescribed if made at all. The working hours could well be more closely restricted to the period from seven A. M. to five P. M.

This circumscription of woman's work hours should be extended to include mercantile as well as factory employments. This proposal is made in the full consciousness of the fact that the abandonment of night opening of stores would be necessitated by such a law. One concession might be made the storekeepers: that women be allowed to work in the evening once a week until nine P. M., provided they were given a half day off. Doubtless such a proposal sounds radical in the extreme and yet it seems difficult to point out any reason why women in the stores should work longer hours than those in factories. Beyond a doubt standing most of the day behind a counter is fatiguing—almost if not quite as arduous as tending a machine. Probably the mental strain is greater in the store, for there the work consists of more than motions that may become mechanical. By the enforcement of such a law the owners of the store would not lose any of their legitimate business. All the things that people really need they will have to buy whether the store closes at five or at ten; it is largely a matter of habit that so many shop in the evening. The individual is helpless against a general custom, but if all storekeepers are constrained by the same law to close at a normal supper hour, the generous employer will not suffer in competition. Of course a store might continue open later if men constituted the force but, as a matter of fact, men successfully demand higher wages than women receive, and there is small danger that men will displace women in mercantile establishments. Probably the women in the towns and small cities would be the chief beneficiaries of such a law.

There remains to be considered the necessity for any limitation of women's hours. In this brief compass two things may be said. First, on humanitarian grounds is this restriction necessary, for an individual who works hard more than nine hours a day has so little energy left that life can afford scant joy. Both leisure and energy are prerequisites to the pleasures which are the natural rights of all citizens. Second, the girls in factories and stores are the mothers of the future generation. Several studies* have

*Notably the Census Publication *Women at Work*.

absolutely demonstrated that the average work life of a girl is short and that most of them withdraw from industry to become housewives and mothers. Now it is widely if not universally recognized that overwork undermines the health, and that the health of the mother tells on the child. Of course individuals differ in their capacities for labor; but at present a law cannot adapt itself to individual variations, neither can industry, hence the need of a uniform restriction. A limitation of hours of work may not materially decrease output for the day, for precision, speed, and freedom from accidents should increase. A limitation of hours, therefore, may aid, and certainly will not much injure the employer. So, for the purpose of giving the women leisure and for the purpose of assuring their children a chance to have health, a restriction of their work hours is necessary.

One final point in which the Indiana law fails properly to protect women should be noted. Every employed female should be allowed one day's absence from work absolutely at her own option once in every four weeks without loss of pay. This statute should apply to every woman from her who scrubs to the college professor. Not only would it add to the comfort of the women, but it would strengthen them to do better work on the other days.

Health and Safety.

So, for the children and for the women Indiana has passed special statutes that are not adequate to the needs and yet that are far in advance of the the progress that has been made in many states. The next general class of laws to attract attention are those meant to provide for the Health, Safety, and Comfort of working folks. These three words "health," "safety," and "comfort" are used together because it may be impossible to determine the primary purpose of an act. For example, the statute compelling factories to provide washrooms and the law requiring a good caboose on railway freight trains are designed at once to afford the employees comfort, and to protect their health. In the factory code as it now stands elevator shafts must be protected, dangerous machinery must be safeguarded, handrails must be placed on stairways, doors must open outward, and, wherever the work is conducted above the second floor, fire escapes must be provided to suit specifications of the fire chief or of the state department of in-

spection. This statute applies to every work building over two stories in height unless the fire chief believes fire escapes to be unnecessary. During the erection of high buildings the law requires such precautions as the laying of floors within one story of that on which work is being done, the protection of staging, the enclosing of hoists, and the guarding of machinery and electric wires. All boilers are subject to rigid inspection twice a year. They have to meet elaborate specifications, to afford a wide margin of safety, and to be equipped with such safety devices as steam gauges, a safety valve, fusible plugs, and a blowoff pipe. Many special laws have been passed to guard the railroad employees. For instance, gangs working outside of the yard limits must have at least two members who are acquainted with the flagging rules; switch engines must be equipped with foot boards, grab irons, and headlights at each end; wires above tracks must be of either copper or aluminum, at least twenty-two feet high, and strung from poles of specified dimensions; water spouts must be fitted with automatic locks in order that they cannot swing back over the track; indiscriminate pushing of trains is forbidden; locomotive engines must be equipped with such ash pans that the ashes may be dumped without the necessity of a man's going under the engine; seventy-five per cent of the cars in steam trains and all electric cars must be provided with power brakes; steam cars must be furnished with automatic couplers; and bridges over tracks must be constructed at least twenty-one feet clear above the rails. There are other provisions for the safety of the employees of the railways, but space forbids their mention, except the class applying to the men as men. For example, the engineers and conductors on steam railroads twenty-five miles or more in length must have had at least two years experience; enginemen, firemen, hostlers, engine foremen, engine watchers, and railway trainmen must be able to read, write, speak, and understand English, and to see and to understand signals; minimum crews are necessary for trains of different sizes and only regular employees serve on train crews except in case a member of a crew is taken ill or injured between stations; no employees except those on relief trains may be on duty for more than sixteen consecutive hours; no one may drink intoxicating liquor on any part of a train or on an interurban car except in those cars licensed to sell liquor in the state of Indiana.

There is also a special safety code for the mines which requires frequent inspection by the mine boss to guard against falling roof, safety switches in the tunnels, wire rope on hoists, brakes on the drums, safety lamps, adequate ventilation, careful use of explosives, certificates of competency for miners, and frequent inspection by a state official. The 1915 legislature has provided for a commission to codify the mining laws and to recommend any changes that seem advisable. A novice reading the Indiana statutes would feel that ample provision has been made for the safety of the working people of the state. Probably the law if strictly enforced would be sufficient, and yet every session of the legislature witnesses some additions to the safety requirements on railroads, in mines, or in the regulation of boilers.

These laws have been framed largely for the benefit of the employee, altho the statutes requiring rest periods on the railroads, competency in the employees, and standardization of boilers, are instances of a two-fold aim which includes the protection of the public. There are, however, certain legal requirements that protect primarily the general health, and incidentally affect the workers. By way of illustration may be cited the prohibition of certain manufacturing in living rooms of tenements of any article for sale, unless the members of the family do all the work, unless the air space is 250 cubic feet per individual by day or 400 cubic feet by night, and unless the Health Officer has granted a written permit. Another important protection of the consumer is provided for in the requirements that the rooms in which food is produced be clean, be properly lighted, drained, plumbed, and ventilated, and be provided with well separated toilets. Sleeping in rooms used for food production is forbidden.

Employers' Liability.

All these laws for the safety of the workers and of the consumers are excellent, but they have failed to eliminate accidents. The old common law theory of accident prevention was that if the workman knew that he had to bear the burden of any mishap, he would take care not to be hurt. Perhaps the common law never bothered about accident prevention, it certainly did put the burden upon the injured man, unless he could prove that the event was the fault of the employer. This was accomplished by three well known

doctrines. The man who entered a dangerous employment knew what he was doing, if he was hurt it was because he had "assumed the risk" of his calling, and he had no recourse to his employer. This assumed risk doctrine went even farther, however, for if the employer failed to use legally required safeguards, the employee still assumed the hazard if he entered the occupation knowing of this failure. The second legal principle by which the burden of the accident was shifted to the workman was the doctrine of "contributory negligence." If the injured man had been in any way careless, even tho far the largest part of the blame for the accident lay upon others, he was legally responsible for his own misfortune. For example, suppose a youth were ordered to clean moving machinery (a violation of statute law), and suppose his jumper were unbuttoned as he went to the task. The garment might catch and pull him into any sort of trouble. Yet he could collect no damages, for his negligence had contributed to his hurt. The third defense of the employer under the common law was the "fellow-servant" doctrine which provided that an employee injured by the carelessness of other employees could obtain no redress from the employer. The theory was that a man could throw up his job if he tho that any of his fellow workmen were liable to commit any act that might endanger him. To make the absurdity of this doctrine clear it is but necessary to illustrate with a typical story. A freight train runs past a red light and in the resulting wreck a brakeman is badly injured. Under the "fellow servant" principle, however, he cannot secure damages from the company, for it was the engineer's carelessness that caused the accident. This doctrine makes the obviously absurd assumption that the employee is responsible for the ability and the faithfulness of the other workers. In the days when these three principles were formulated, when there were no large power factories, when employees in one establishment were few and could know each other well, when risks were not as many, as subtle, and as complicated as they are today, perhaps the doctrines were justifiable. Now, however, they are so broadly construed and so readily invoked on appeal to the higher courts that a prominent Indiana corporation lawyer has never lost a work accident case for any of the companies he has defended. Such a condition of the law gave the employers no incentive for pro-

tecting their men. It was so easy to escape financial responsibility that it was cheaper to ignore the legal requirements for safeguards than to obey them.

Until 1915 the development of Indiana's law in this particular was slow and spasmodic. In order to prevent employers from refusing work to men who would not sign such a waiver of rights, early statutes made non-enforceable an agreement waiving the employee's rights to damages if injured, unless the contract were made after the mishap, or unless the employer provided a voluntary relief association. Another early step was the enactment that in accident damage suits the employee did not have to prove that he had not been guilty of contributory negligence. This was a very small gain, tho a real one. Then the legislature tried to make all corporations liable in cases where the injury was incurred by a fault in the tools, machinery, or works, where the injury resulted from obedience to rules or laws of the company or to commands of a superior, or where a fellow employee was to blame; but the courts first decided that this act was unconstitutional except as it applied to railroads, then exempted electric railways, and finally they weakened its application even to steam roads. In 1907 two forward steps were taken; first, railways were forbidden to require of the employee a waiver of rights to sue in case of accident as a condition to joining a voluntary relief association; second, these carriers might not avail themselves of the "contributory negligence" defense if a mishap resulted from failure to adapt the overhead bridges to the requirements of the law, or from failure to clear the track of obstructions. But it was not until 1911 that any general progress was made. By the enactment of that year the old rule putting the burden of proof of negligence upon the employer was reaffirmed, and he was denied the right to use the defense of "assumed risk" if the law or orders of the qualified state officials had been disregarded, or if the accident was brought about by obedience of the injured man to orders. The provisions of this statute were a poor sop to labor, and Indiana was still on the black list of states.

Workmen's Compensation.

In 1913 the legislature evaded the workmen's compensation question by providing for a Committee to report in 1915 on the defects of Employers' Liability, and their reme-

dies. So in 1915 the issue was fairly faced and Indiana was given a real "workmen's compensation act."

No employer and no employee is compelled to accept the terms of this law, but if the employer refuses to be bound by its provisions he forfeits the three defenses that have been discussed, namely, contributory negligence, the fellow servant doctrine, and the assumption of risks by the employee. The loss of these bulwarks would mean that when the jury awarded damages to an injured workman a higher court would have difficulty in overruling the verdict on a legal technicality. On the other hand, if the employee alone elect not to come under the law, these defenses are left unimpaired and he stands small chance of collecting damages in case he is injured. Unless formal notice to the contrary is given, however, it is assumed that both employer and employee have chosen to be governed by the terms of the act. The act does not apply to casual laborers, to domestic servants, or to farm laborers unless they and their employers specifically elect it.

Under this law the procedure is fairly simple. As soon as possible after an accident, the injured employee or his representative must notify the employer of the time, place, nature, and cause of the mishap, together with the name and address of the victim. After the receipt of this notice and until thirty days after the accident, the employer must furnish medical attendance and such hospital or surgical service and supplies as are necessary in the opinion of the Industrial Board. If the employee refuses to accept this service, he forfeits claim to compensation during the continuance of such refusal unless the Industrial Board approves his course. Moreover, he cannot refuse to submit to an examination by a physician representing either the employer or the Industrial Board, altho he may have present a physician representing himself. Beginning with the third week after the accident and during the period of total disability not to exceed five hundred weeks the injured man is to receive weekly fifty-five per cent of his average weekly earnings before the accident. For purposes of calculating compensation the law provides that these weekly wages cannot be less than ten dollars nor more than twenty-four dollars. In cases of partial disability, the injured man is to receive for the period of the disability, but for no more than three hundred weeks, one-half of the decrease in his earn-

ing power. But for specified injuries resulting in permanent partial disability the payment is to be fifty-five per cent of the old average wages for a number of weeks not over two hundred. By way of illustration, the loss of the hand at or above the wrist is compensated for by fifty-five per cent of old wages for one hundred and fifty weeks, the loss of one eye for one hundred weeks, and so on. After the payments have been made for twenty-six weeks, the future payments may be converted into a lump sum fixed by the Industrial Board and not over the commutable value of the future installments. In case of commutation the Industrial Board may have the circuit or superior court appoint a trustee to administer the fund. If the employee is killed by the accident, the dependents receive fifty-five per cent of the deceased's average weekly wage for three hundred weeks, and the employer is to pay funeral expenses not exceeding one hundred dollars. If the employee dies from another cause than the accident while receiving compensation, the compensation is to be continued to dependents for the regular period. If an employee, leaving no dependents, is killed, the employer is to provide funeral expenses not to exceed one hundred dollars, and no more.

Beside these, the main provisions for compensation, there are many safeguards in the law, both for the employer and the employee. The employer is not relieved from penalties for failure to perform his statutory duty. A principal employer is responsible for ultimate payment by his sub-contractors of compensation for injuries received on the premises of the principal or during work under his direction, the act applying even if the mishap occurs without the state. The employer must either insure in an approved company or else give bond of his ability to make compensation payments, but the Industrial Board may revoke the privilege of self insurance on sixty days notice; the insurer must agree to settle all claims promptly; and, finally, compensation claims have the same priority as unpaid wages in the settlement of bankrupts' affairs and in the winding up of estates. On the other hand, no compensation is due if the injury is self inflicted, or if it is the result of wilful failure to use a safety appliance or to obey a statute or of intoxication on the part of the injured—but in these events the burden of proof is on the employer. Moreover, the compensation payments do not begin until two weeks after

the accident; this is to guard against the purposeful incurring of minor injuries by workers. If a partially disabled employee refuses to accept work he can perform, his compensation is to cease during the time of his refusal unless his position is approved by the Industrial Board. Either party may appeal to the courts on questions of law but not of fact. Finally, companies already having compensation systems of their own may retain them provided they are no less liberal than the law, and employers may still form mutual insurance associations.

Such is Indiana's Workmen's Compensation Act. What may be expected from it? In the first place, there will doubtless be an apparent increase in the number of accidents, for the workers will find it worth while to report minor injuries. Second, instead of being practically sure that there is no possibility of obtaining any damages the injured man who has not been grossly negligent will be certain of prompt compensation—not, indeed, adequate, but still worth having. Third, the number of serious accidents should decrease, for the insurance companies will offer lower rates to the plants that have the best safety provisions, and it will then be to the employer's advantage to protect his men. Fourth, the courts will find relief from a tremendous amount of litigation, because the law provides for settlement of claims by the Industrial Board. Court justice, however, will be denied to no man, as the way is open for appeal on points of law to the circuit or superior courts. Moreover, a great waste of money paid the lawyers by workmen and employers in liability legislation should be saved. Fifth, there is removed by this law one of the grounds for the discontent of the workers and for suspicion between employer and employee. Sixth, the state will be relieved of part of its burden in the support of paupers. It is probable, finally, that the burden upon the employers will be little if any greater than the old cost of litigation, for the lawyers' charges and legal fees will be saved and the number of serious accidents should be diminished by greater care. It will be interesting to observe the working of this act.

Protection of Remuneration.

The next class of labor legislation is that which is designed to insure the wage earner full remuneration for his

effort. Nothing like a minimum wage has yet been seriously suggested for Indiana, except for school teachers and men working out their road taxes. Nevertheless, there are other ways in which the workman is protected. The employer must pay wages at least twice a month, and, when he pays, he cannot hold back earnings for more than the preceding ten days. Moreover, wages must be paid in lawful money. If anything else is tendered in payment, the instrument must be redeemed at its face value. If the script is not payable on sight, it must carry eight per cent interest on the sum due. No employer may withhold any part of the wages as a fine, nor may a railroad keep back pay for the support of a hospital, reading room, library, gymnasium, or restaurant. A large class of employers is forbidden to compel their employees to purchase supplies of any particular person, or to sell to their own employees at prices higher than they charge others. These statutes are designed to prevent the abuse so prevalent in the past, of compelling hands to buy their goods from the "company store" at outrageous prices. Under the "company store" system, combined with payment in checks that may be cashed only at these shops, in some states today employees are continually in debt to their employers, and they cannot seek a better job without running in danger of the law. Finally, the miners of coal, when paid by weight, are allowed to employ a check-weighman, to see that all measuring is fairly done. Disputes between this check-weighman and the mine-weighman are to be settled by the state mine inspector.

The laws just enumerated protect the workman in his dealings with his immediate employer, but there are other important statutes which protect him from third parties. In the first place, debts to persons for mechanical or manual labor are claims to be preferred before any other except legitimate costs and expenses in cases of receivership. Wages up to fifty dollars for work within two months of his death are among the preferred claims against the estate of a decedent, but in this case they are payable after expenses of administration, expenses of the funeral and of the last illness, taxes, and secured debts. Second, future wages may not be assigned for a longer period than thirty days, and then only upon written notice to the employer and formal consent of the wife of a married man. No Indiana

court may entertain any action of a non-resident for garnishment of wages, and garnishment is not allowed for any cause for amounts up to twenty-five dollars at any one time in case of a householding employee. At nearly every session of the legislature attempts are made to allow the garnishment of wages, but they are strenuously opposed by the employees, and are not favored by employers, because a man who is not going to receive a decent wage will not be likely to put much enthusiasm into his work. If it is impossible to garnish or assign wages, the thriftless workman is less likely to go into debt, because his creditors are sure that they cannot be certain of recoupment, and, consequently, will hesitate to loan large amounts if, indeed, they will lend at all. In other words, this prohibition of garnishment and assignment of wages protects the wage earner from himself.

Employment Bureaus.

The state not only protects the workingman in the enjoyment of what he has actually earned, it also tries to help him find work. The private employment agencies had committed many abuses. So in 1909 a law was passed which compels them to pay a license fee, to give bond for honest operation, to charge applicants for positions no fee exceeding ten per cent of the first month's wages, to print the law regarding employment agencies on the back of the receipt for the fee in order that the patron may know that he has certain legal protection, to refund on demand fees of applicants for whom positions have not been secured, and finally, to keep a register of applicants. *Some of these institutions had actually failed to record the names of those who had paid them for aid in finding work.

But it was feared that no amount of supervision could make the private agencies what they ought to be, so Indiana followed the example of a number of the more progressive commonwealths and established free public employment offices. The main office is in the State House at Indianapolis, and branches are at Evansville, Fort Wayne, Terre Haute, and South Bend. In the first five years of their existence, these offices received 26,314 applications for work and 25,472 applications for help, and they placed 18,076 individuals. It is impossible to find on the list of applicants persons fitted to fill some of the positions offered. The great field of this

*The law does not apply to teachers' agencies.

bureau is in finding work where little or no skill is required. In the quarter ending March 31, 1914, for example, of 249 who were placed, one hundred were laborers, thirty-two farm and dairy hands, twenty-two handy men, and sixteen dishwashers and kitchen workers. The next largest group is that of carpenters and cabinet makers, of whom eleven were placed. Further statistics would be tedious, but they would show that in Indiana as elsewhere the vast preponderance of the activity of free employment bureaus is for the benefit of the unskilled.

Arbitration and Conciliation.

For a long time there was upon the statute books a law providing for a Labor Commission of two members who were to visit the scene of any labor trouble, to endeavor to bring the parties together for conference, or to induce them to arbitrate their differences. This act, however, was absolutely ineffective. No one seemed to have confidence in its satisfactory operation, so in 1911 the Commission quietly gave up the ghost. The strikes in Indianapolis in 1913 made it evident that some attempt must be made to provide for the peaceable settlement of labor disputes, and the 1915 general assembly made another effort. Under this statute if a controversy arises that involves more than fifty employees, the Governor may appoint a board of three members, none of whom is directly interested in the controversy; this he may do either by request or upon by own initiative. The members of this board are to receive ten dollars per day, their expenses, and such clerical aid as is necessary. This board is to establish communication with the parties to the controversy, and is to endeavor to bring them together on grounds mutually satisfactory, or, failing in this, to induce them to arbitrate. If neither of these attempts succeeds, the board must conduct an investigation, and, in order that this inquiry may be more than a farce, the board has power to subpoena witnesses, to compel testimony, and to demand the production of books. The findings are to be filed with each of the disputants and with the governor, and they are to be published. Thus it is hoped that public opinion can be brought to bear to force a settlement when intervention fails. Under a strong and tactful governor there is no doubt that a great deal more may be accomplished under this law than under the old one, yet it is hardly to be hoped that the state will be freed from strikes.

Miscellaneous Labor Laws.

The Indiana laws forbid certain forms of boycotting and of blacklisting, but the courts have so weakened the prohibition of the blacklist that it is practically inoperative. Some measure of protection is afforded the working man by the act of 1915 which requires every employer who asks written recommendations to furnish a former employee upon written application a true statement of his reason for leaving.

It is illegal for the employer to attempt to coerce his employee to vote, or to vote in any particular way by threats of retention of wages or of discharge, and, in addition, the employee must be permitted to vote.

It is illegal for any one to pay the transportation of an alien, or to contract for the employment of an alien. This is an old law aimed to prevent the practice of importing foreign labor willing to work for very low wages, a practice which tended strongly to undermine the pay of the native workers.

The Industrial Board.

The new Workmen's Compensation Law provided for the reorganization of the old Bureau of Inspection which is replaced by the Industrial Board. This non-partisan body consists of three members appointed by the Governor at salaries large enough to tempt fairly good men, to whom are intrusted the inspection of factories, boilers, and mines, the collection and tabulation of accident statistics, and the administration of the Workmen's Compensation Act. This Board began its work in the summer of 1915; its task is one requiring both tact and courage. It is to be hoped that its labors will meet with success in every sense.

Summary.

From this sketch of the labor laws of Indiana, it can be gathered that the state was long backward in properly providing for the welfare of its industrial classes. But in the last half dozen years great improvements have been made. Altho there are still many gaps in the law, some of which have been indicated, the citizens of Indiana may be glad that during the last years of its first century of statehood, the commonwealth has grappled its labor problem with a new vigor that promises ultimate success.

CHAPTER VIII.

Government

In conditioning the happiness of the people of a state the character of the government is second to its natural resources alone. Welfare is impossible without a material basis in soil-fertility, or mineral wealth, or rich forests, or favorable climatic conditions, or such a combination of these and other circumstances as will reward able men for exertion. Just as a wise economy of human energy may be fostered by unselfish and competent statesmen guiding the affairs of the commonwealth, so, on the other hand, may enterprise be hampered and discouraged by inefficiency, indolence, or corruption of the officials. It is fashionable in certain circles to declare that, in a republic, the people are governed exactly as they deserve to be ruled, for they themselves choose the officials. It is every bit as smart in other company to assert that the great mass of voters is woefully unable to express its real desires, because popular government is conducted under a constitutional system that necessitates domination by a few individuals. Since there seems to be a large element of truth in each of these positions, this chapter will contain a description of the system of government in Indiana, with occasional comments on its adequacy to the needs of the state, the next will take up the problem of public finance, and a third will deal with the question of constitutional revision. In this sketch it will be impossible to touch the details of the work of every official; that would be dry and, perhaps, unprofitable. Attention will, therefore, be directed to the important factors.

Townships.

Indiana is divided into ninety-two counties which, in turn, are subdivided into townships. Until 1899 the entire local government of the unincorporated Township was vest-

ed in one man, the Township Trustee, but at that time his power was somewhat limited by the creation of the Advisory Board. This Board consists of three men who must be freeholders resident in the township and who are elected at large for a term of four years. It must meet annually on the first Tuesday in September to consider the finances of the Township for the next year. At this meeting, after choosing the chairman and secretary, the Board considers the estimates of the Township Trustee, which he must have made public at least thirty days beforehand in order that interested taxpayers may appear and present their views concerning expenditures. The budget submitted at this meeting by the Trustee must be detailed, and its author must be ready more fully to explain any item not satisfactory or not clear to the Board. At the conclusion of the discussion the Board adopts, either intact or in amended form, the budget submitted by the Trustee and officially proceeds to set the tax rate necessary to provide the appropriated funds. This action is then certified to the County Auditor in order that the County Treasurer may collect the assessments. When these appropriations have been made, the Township Trustee may not use funds voted for one purpose in any other way. If an appropriation is proven inadequate, or if a particular emergency is encountered, a special meeting of the Board may be called. At this special meeting the Board may vote to borrow the money necessary for the work. If the loan is small, it may be repaid from the proceeds of the next tax levy, but if it is too large for such elimination, bonds may be issued to run not more than fifteen years and to bear not over six per cent interest. On the first Tuesday after the first Monday of January the Trustee must report under oath on his administration of funds the preceding calendar year. When this report has been adopted by the Board it is filed with the County Auditor and an abstract published, that all citizens may see it without exercising their right to inspect the complete document. So, thru its absolute power over expenditures the Advisory Board is the real government of the Township.

In spite of this recent development of the Advisory Board, the Township Trustee is an officer of large powers and responsibilities. He is elected by the voters to be the main executive of the community for a term of four years. He receives the township funds collected by the County

Treasurer, and he must account for their expenditure. He exercises supervision over the property of the Township, and, whenever necessary, he may appoint an attorney for its defense at law. In his township the Trustee is ex-officio inspector of elections, fence viewer, and overseer of the poor, and he has almost complete control of the schools. Finally, he exercises supervision over the District Road Supervisors, as he until a few years ago controlled the Township Road Supervisor. For all these services the Township Trustee is allowed pay at the rate of only two dollars a day while he is actually at work on official business, unless the population of the Township is twenty-five thousand or more, when the remuneration may be larger. The salary increases in an irregular way with the increase in the size of the township to a maximum of twenty-five hundred dollars a year. From this description of his powers and duties it is easy to see that the money inducement is not sufficient to command the services of a man competent to determine the policy of the schools and to select well-trained teachers, competent to attend to that serious problem, the handling of the poor, competent to direct the care of the roads, and competent to exercise discretion in the expending of large funds. Some men of real power and ability have been attracted to the office, but on the whole the incumbents are unequal to the responsibility.

The determination of justice within the Township is entrusted to Justices of the Peace. The County Commissioners determine the number of these officials, but they may not allow more than two to a township, unless the community contains an incorporated town, in which case an additional Justice may be allotted for each incorporated place. These Justices, who must open their offices every day, have jurisdiction in suits on contract or for damages by tort for sums less than one hundred dollars, altho it is possible to confess judgment up to three hundred dollars before them. They may compel the attendance of witnesses and conduct trials by jury if a party to the suit demands it. These juries are to consist of six men, unless both litigants consent to a smaller number. On the decision of a case the Justice may issue an execution. To assist the Justice of the Peace a Constable is elected once in four years. This officer must serve all processes legally put into his hands, levy executions, pay over to its rightful owner money col-

lected on writ, and make arrests. He is conservator of the peace, and so he may take into custody anyone whom he catches in the act of breaking the law.

Towns.

Because the need for governmental activity in the open country is small the form of government for townships is simple and is not entrusted with very wide powers. Therefore, as population collects in one spot, and as the needs for sidewalks, street lights, protection against nuisances, and other community activities consequently develop, a more elaborate system of supervision is demanded. When the people realize this necessity they may file with the County Commissioners a petition for the incorporation of a Town. If the County Board is satisfied that this document is signed by one-third of the qualified voters, including one-third of the freeholders residing in the area proposed for the town, they must hold an election in this district to determine the question by ballot. By a favorable majority the Town is incorporated, and it is at once divided into not less than three and not more than seven wards. From each ward a Trustee is elected once in four years, but the terms are so arranged that approximately one-half are elected each two years. The Town Board of Trustees has the supervision of the property of the town, and the care and regulation of the streets. That is, it may prescribe the conditions under which railways and interurbans cross or use the streets, it may set reasonable speed limits, contract for street lighting, require licenses of peddlers, compel the construction of sidewalks, and appoint a Street Commissioner. The Board has limited power to provide for the safety of the town; it may appoint a Fire Chief, it has authority to compel citizens to aid in fighting fire, and it can lawfully organize fire companies and regulate the use and storage of combustibles. The Trustees may also secure the comfort of the inhabitants by defining and abating nuisances, by restraining the running abroad of fowls and animals, by regulating or even erecting slaughterhouses, and by planting trees or making parks. Finally, they have some moral supervision, as they may license the sale of liquor, prevent vice and immorality, and enact ordinances imposing penalties not exceeding ten dollars. To make possible the government of the towns the Board has power to levy taxes on property and to tax each

poll twenty-five cents, each male dog one dollar, and each female dog two dollars. An additional tax of twenty-five cents per hundred dollars of taxable property may be levied for the purpose of street improvements, and bonds may be issued to finance the erection of public buildings. For other purposes debts may be contracted only by authority of a petition of a majority of the resident owners of real estate.

As in the case of the Township, the taxes are collected by the County Treasurer and turned over to the Town Treasurer who can disburse the funds only on the order of the Trustees. The man who is Treasurer may also be Town Clerk, and in that capacity he may act as secretary of the Board of Trustees, voting only in the case of a tie. The Marshal is the third of the town officers. He serves as Chief of Police, and he may be appointed to act as Fire Chief and Street Commissioner if the Board sees fit. These three officers, Treasurer, Clerk, and Marshal, are elected for terms of two years each. The schools of the town may be left in the hands of the Township Trustee, but are usually put in charge of three School Trustees elected by the Town Board.

This survey shows two things. First, the machinery of government in the Town is considerably more complicated than in the Township, more administrative specialization being possible and a larger body being given financial power. Second, the Town government is far more powerful for good or for evil than is the Township government. Both of these changes are natural results of the increased density of population in a small area.

Cities.

But as the population continues to agglomerate, the powers of the Town officers become inadequate for the enlarged demands of the community. Not only does the mere routine business become too great for the physical capacity of such officials as the Marshal and the Street Commissioner, but the ordinance power of the Trustees also is inadequate to cope with many new problems. So it has been provided that one-third of the voters of any incorporated town may petition the Board of Trustees for incorporation as a City. If the last census showed the town to be inhabited by at least twenty-five hundred persons, or if a special census returns a population of two thousand, the Trustees

must submit the question to popular vote. If a majority of the ballots are in favor of the change, the Town becomes a City without further formality. The new City must at once be divided into wards not less than three in number, but having at least three hundred inhabitants in each. The ward lines may not be altered oftener than once in six years unless an annexation of territory necessitates the readjustment and unless two-thirds of the City Council vote for the change.

The cities are divided into five different classes, mainly according to their population at the most recent United States Census. Indianapolis is the only city of the first class, as it is the only one having a population over one hundred thousand. To be a city of the second class a population of thirty-five thousand, but less than one hundred thousand, is necessary, unless a municipality having not less than sixteen nor more than thirty-five thousand inhabitants and taxable property worth at least twenty million dollars, decides by majority vote to become a second class city. Under the old law, Evansville, Fort Wayne, South Bend, and Terre Haute were second class cities. The alternative provision was adopted by the General Assembly of 1915 for for the accommodation of Gary. Anderson, Hammond, Lafayette, Muncie, New Albany, and Richmond are the cities of the third class, as they have populations of not less than twenty thousand, but less than thirty-five thousand. In the fourth class are the cities having ten thousand, but fewer than twenty thousand inhabitants, and having, also, taxable property of at least five million dollars value, and also cities having less than ten thousand population, provided their taxable property in 1913 was worth seven and a half million dollars. The fourth class cities are East Chicago, Elkhart, Elwood, Gary, Huntington, Jeffersonville, Kokomo, Laporte, Logansport, Marion, Michigan City, Mishawaka, Peru, and Vincennes. All other cities, namely, those having less than ten thousand inhabitants and those having less than twenty thousand inhabitants and also less than five million dollars worth of assessed property, are in the fifth class. It is a fact worth noticing that only four cities of the first four classes, Evansville, New Albany, Jeffersonville, and Vincennes, are located south of a line drawn from Richmond to Terre Haute.

As the City grows in population or in commerce, per-

sons are likely to attempt to escape from its high taxes or from its restrictions by placing their residences and factories just without the corporate limits. The result is that owners of property who are enjoying practically all of the advantages of the city, escape bearing their share of the burdens of government. The law therefore allows adjacent territory to be annexed by the City Council, if published notice is given two weeks in advance of final action. The only defense of the citizens on the land which the Council proposes to annex lies in the privilege of one or more persons who feel themselves aggrieved. They may petition the Circuit Court or the Superior Court that has jurisdiction. Then, if three-quarters of the property owners in unplatted territory sought by the City or two-thirds of the voters in an incorporated place sign a protest, the court may prevent the annexation, unless it is necessary for the prosperity of the City. The municipality must take over the public debts of the land it annexes. By a majority vote of the voters in any two or more incorporated places, they may merge. Thus it is possible for a city to grow territorially as its needs develop.

In the City the legislative power is vested in a Council. In Indianapolis this council consists of nine members. The City is divided into six councilmanic districts, and no political party may nominate more than one candidate from any one district. The voter may cast his ballot for nine men. Thus it is assured that not more than two-thirds of the members of the Council will be chosen from among the candidates of the same party, and the City is given what is known as a "bipartisan" government. In other cities one councilman is elected from each ward and other councilmen equal in number to half the number of wards are elected at large, but there may be not fewer than two nor more than six councilmen-at-large. The City Council must meet at least once a month, but it usually assembles more frequently. In cities of the first and second classes the Council elects its own presiding officer, but in the other municipalities the Mayor presides. The City Clerk is also Clerk of the Council. If the Mayor refuses to sign any ordinance it may be passed over his veto by a two-thirds vote. So the necessity for his signature is a real check upon the Council. There is another check, namely, the fact that no ordinance may be passed at the meeting at which it is introduced, ex-

cept by unanimous consent. The City Council possesses all the powers of the Town Board with some additions. For instance, it may impose penalties not exceeding three hundred dollars and six months imprisonment for violation of its ordinances; but the Council must have published the proposed ordinance twice before it can be effective. The Council may very strictly regulate buildings both by setting fire limits within which all structures have to conform to certain standards and by requiring permits for additions, alterations, or erections. It may exercise jurisdiction over streams for ten miles beyond the corporate limits and for four miles over certain classes of factories which are likely to create nuisances—glue, tallow, and soap works, for example. The Council's health powers are considerably more extensive than those of the Town Board, for it may regulate the keeping and removal of garbage and other wastes, having jurisdiction in this particular for four miles beyond the city bounds; it may regulate cemeteries and interments, establish quarantine rules, require the registration of births, deaths, and diseases, authorize the inspection and condemnation of foods, and insist upon the inspection of pipes, drains, and wires. Again, the City Council has extensive powers to regulate by license or otherwise such businesses as the operation of hand organs or the rendering of music in the streets, the conduct of lumber yards, letting wharves, furnishing amusements, peddling, pawn-brokerage, the transfer of baggage and passengers, the keeping of inns and restaurants; the sale and manufacture of intoxicating liquors (the license fee of a saloon being limited to \$250 and that of a brewery or distillery to \$1,000), the keeping of second-hand and junk shops, and the sale of milk. Besides these possibilities of collective protection the Council may provide for the inspection of weights and measures, of boilers, and of elevators; it may prevent reckless driving and control the use of streets and bridges; and it may prevent or regulate the use of fire arms. So the Council enjoys a large range of powers, but none which is not necessary for the welfare of the citizens.

As the City Council is more powerful than the Town Board of Trustees, so, also, are the City officers more numerous and more potent. At the head of the administration is the Mayor, who, like the Councilmen and the other officials, is elected for a term of four years. It is his privilege

to call special meetings of the Council when necessary, to make recommendations to that body, to appoint successors to councilmen who retire before the expiration of their terms, and to sign or veto the measures passed by the Council. These may be called his legislative functions. As an executive he appoints the heads of departments in cities of the first four classes, and names, in cities of the fifth class, the Marshal, the Fire Chief, and the Street Commissioner. Whom he appoints to administrative position he may also remove. Furthermore, he exercises a general supervision over the work of the departments, signs bonds, deeds, and licenses issued by the City, and is obligated to execute and enforce ordinances and laws. The Council of cities of the fourth class may require the Mayor to act as City Judge, and this judicial work is one of his regular tasks in fifth class cities.

The Mayor has a general colleague in the City Clerk, who acts as the Clerk of the Council, and keeps records of ordinances passed. This official may be required, in third class cities, to act as Controller, and in cities of the third and fourth classes he is a member of the Board of Public Works.

In cities of the first four classes, the details of the administration are entrusted to the Executive Departments, which develop their own rules of procedure. The most important of all of these is the Department of Finance, under the Controller. This officer prescribes the forms of accounting in all departments and audits their accounts, keeping a separate record of each fund, whether a trust or an appropriation, and he countersigns all warrants. He must refuse to validate a warrant if there are not in the city treasury funds to meet it. He is commissioned to audit the accounts of the City Treasurer, and to examine the county tax duplicate, as far as it relates to the City, in order to detect any omissions. In addition to these duties, he is the official who actually issues licenses. Another important responsibility of the Controller arises from his part in the preparation of the budget. This document is worked out at a meeting of the heads of the departments, at which each forecasts his own needs, and the Controller supplies the estimate for the general funds. Then the Controller submits the budget to the Mayor, who hands it on to the Council with his recommendation. Thereupon, before the first

Monday of September of each year, the Council makes the appropriations and fixes the tax rate. When bonds are issued by the authority of the Council, it is the Controller who attends to all the details of their preparation, sale, and registration. Also he is one of the three sinking fund commissioners who have custody of the money accumulated to meet the debt when it falls due. In cities of the fourth class the office of Controller may be abolished by the Council; in cities of the third class the Clerk acts as Controller, unless the Council votes to have a separate Controller. With all these powers it would seem that the Controller is one of the most important officers in the whole of the city government. As a matter of fact, being appointed by the Mayor, he must obey that official's behests or run the risk of losing his position. So it comes about that the Controller is not usually a potent factor.

Perhaps most intimately connected with the Department of Finance is the Department of Assessment and Collection under the City Treasurer. In county seat cities, the County Treasurer is also City Treasurer, except in the case of certain cities of the fourth and fifth classes which own public utilities of a considerable value. Then the fact that so many small transactions have to be attended to makes it permissible for these cities to have their own official. In the larger cities the Board of Public Works relieves the Treasurer of this part of his business. The Treasurer is merely a custodian who receives the city funds from the County Treasurer and from the patrons of public utilities in certain cities, and who pays out cash upon the presentation of properly signed warrants.

The City Attorney is at the head of the Department of Law. He is appointed by the Mayor, except in cities of the fifth class, where he is elected by the Council. He is obliged to furnish legal advice to the other city officers and to represent the City in its suits.

The Board of Public Works is one of the most important departments. In cities of the first, second, and third classes it is appointed by the Mayor, and not more than two of the three members may be of the same political party; but in cities of the third class the Council is commissioned to perform the duties of the Board of Public Works, unless it passes an ordinance providing for the appointment of the Board; and in cities of the fourth class the Board is com-

posed of the Mayor, the City Engineer, and one other member appointed by the Mayor. This Board has charge of the purchase and the management of real estate and other property of the city; it keeps records of the location of pipes, conduits, and drains in the streets and alleys; it cleans, lights, sprinkles, and maintains the highways; it looks after the disposal of garbage, sewage, and other wastes; it sees that the water courses are kept clear, that the water may promptly be carried off; it contracts with private companies to supply water, gas, electric light, telephone service, heat, and power to the City and to the people, or it operates municipal plants; and it supervises the use of the streets by public utilities. In cities of the third and fourth classes this Board of Public Works has, in addition, the duties of the Board of Public Safety.

The Board of Public Safety, whether separate, as in cities of the first and second classes, or combined with the Board of Public Works, as in cities of the third and fourth classes, consists of three members appointed in the same manner as the Board of Public Works. It has supervision of the police and fire systems, of buildings and boilers, of markets and foods, and of pounds and prisons. In cities having at least fifty thousand inhabitants, however, the Council elects three Commissioners of the Metropolitan Police and Fire Department, who exercise complete control in these fields. Similar commissions may be chosen in cities with a population of ten but less than thirty-five thousand.

Cities of every class have a non-partisan Board of Health and Charities, consisting of three persons, except in Indianapolis where the membership is four. This Board has a paid Secretary who must be a physician. Its task is to register births, deaths, and marriages, to furnish ambulance service, to inspect the plumbing and drainage in houses, to nominate food inspectors for appointment by the Board of Safety, and to draft ordinances relating to health matters. In Indianapolis this Board has charge of the playgrounds and swimming pools.

A City Judge is elected, except in cities of the fifth class where the Mayor acts in that capacity. He has concurrent jurisdiction with the Circuit Court in cases of petit larceny and of violation of State law entailing a penalty under five hundred dollars fine or six months imprisonment; otherwise his functions are like those of the Justice of the Peace.

In Indianapolis there is an additional Department of Parks, but in other cities the parks are under the care of the Board of Public Works, unless committed to the care of trustees.

Some of the special features of the government of cities of the fifth class have been noted, but they may well be enumerated at this point. Instead of the departments of the other cities, these municipalities have Marshals, Fire Chiefs, and Street Commissioners, appointed by the Mayors. In a fifth class city, the Mayor acts as City Judge, the Council serves as the Board of Public Works, there is no Controller, the Council instead of the Mayor selects the City Attorney, and there is no Department of Public Safety. Thus an attempt has been made to simplify the government of the smaller municipalities.

In every city, and more particularly in the larger ones, the offices are valuable, not for the salaries, which ordinarily are small, nor for social prestige, as scant recognition is given the politicians by cultured circles, but for power. Altho its power has been lessened by the creation of the Public Service Commission (in 1913), it is possible for a city government to pester a public utility almost without limit or to grant it favors of tremendous value; it is possible to make life miserable for some manufacturers or to allow them with impunity to violate conservative regulations; it is possible to enforce the laws against the maintaining of houses of ill-fame and the gambling dens or to ignore their existence; it is possible to make contracts decently favorable to the city and to enforce their terms or to enter agreements that give individuals immense profits for shabby work that will need extensive repairs within a few years and so afford additional private gain at public expense. In truth there are many ways in which control of the government of a city may be made highly remunerative. Therefore, men are found who can obtain a handsome living by making a business of "owning" a city, and there are other men, engaged in other businesses, who find it well worth while to increase their fortunes by purchasing, directly or indirectly, the favors which the politicians can bestow or withhold.

Why is it the case that a few men can control a city? A machine can always count on the fact that most men pin their allegiance to an object which is absolutely unworthy

of loyalty,—to a political party. Because a man believes in free trade or protection he is almost sure to vote for candidates whose names appear under certain emblems on a city ballot. It is easy to see why a politician should want to foster this notion that there is a connection between local and national parties; no man who dares to think, however, will be misled into believing that his loyalty to certain principles, which may be the real faith or which may be the lip creed of a group of men united to influence national affairs, necessitates his allegiance to the same group in their municipal operations. Right here is a fact which is often lost sight of. Altho the national parties can appeal to deep emotions and to general principles, the issues which they raise are of comparatively small importance when placed beside the question of efficiency in municipal government. Since even a city with large wealth can find new and useful fields for profitable collective expenditure, the soundest business judgment is needed to husband the resources of municipalities; yet a large number of men determine their action on reasoning pertinent to the nation rather than the city. But there is another element, the element that may rightfully claim to be the "independent vote," the element that is willing to sell its ballots. It is these men whom the expert politician can well handle. It is probably safe to say that there is not conducted in this State a city election without some sort of fraud, the buying of votes, the introduction of floaters or repeaters, or the falsification of the returns in some manner or other. Witness the facts established in 1915 relative to Terre Haute, Indianapolis, Muncie, and Evansville. The situation is not peculiar to Indiana, but is a national evil. The cities are corruptly governed because some persons can gain by corruption and because individual voters are blind or mercenary. It may be the system, or it may be the lack of interest on the part of the voter that is to blame for the inefficiency and corruption in the municipal government of Indiana. It may be the fault of the voter and of the system combined. At any rate this can be said: The State law now imposes on all the cities of the commonwealth practically the same form of government. Commissions and single managers are successfully conducting municipalities in other states and in Europe. One thing can be done, the cities can be allowed to frame their own constitutions, and they should be allowed to experiment with the

other plans that elsewhere really do secure efficiency. It is doubtful whether they can fall into anything worse than the present system.

Counties.

The principal governing body in the County is the Board of County Commissioners. The County is divided into three districts from each of which must come one of this Board. The term of office is three years, and one new man, chosen at the regular election by the voters of the entire County, enters office each year. The County Board, altho it cannot make appropriations, does audit the accounts of all officers having charge of any county funds, passes on all claims against the County, and annually draws up a complete estimate of expenditures for the coming year. This estimate is turned over to the County Auditor, and by him is presented to the County Council. The Commissioners also are required to maintain a court house and jail, and to provide the offices for the county officials. They receive and pass upon petitions for changing watercourses and improving roads, and they may declare a stream navigable. They may offer bounties on animals and birds that are supposed to be noxious or destructive, and they may aid county fairs by the ownership of fair grounds and by the loaning of money to the Fair Association. It should be borne in mind, however, that no money may be spent by the Board without the sanction of an appropriation by the Council. The Board has one other function that is important, namely the judicial. When the Commissioners sit as a court they have the power of keeping order just as an ordinary court. Any decision of the Board, however, is subject to appeal to the Circuit or Superior Court. It can, nevertheless, settle the merits of a good many cases involving county business.

Because it was felt that some check upon the County Commissioners was needed, the County Council was instituted. This body consists of seven men elected for terms of four years; three of them represent the county at large and the other four are chosen by four councilmanic districts. They are not allowed to hold any State, County, Township, or Municipal office while serving on the County Council. Annually on the first Tuesday after the first Monday of September they meet to pass upon the budget. Before the middle of August every county officer has been required to

prepare a particularized estimate of the necessary expenses of his department for the coming year. These, together with the estimate of the Commissioners and of the Clerk of the Circuit Court are submitted by the Auditor to the County Council in the form of an ordinance making appropriations. After consideration the Council adopts the budget for the year, but it has no power to insert an appropriation not mentioned in the estimates, unless three-fourths of the members favor such an expenditure. If the appropriations made in this budget are later found to be insufficient, emergency appropriations not exceeding an aggregate of fifteen thousand dollars are permitted. The Auditor, who acts as Secretary of the Council, keeps track of these appropriations, and pays out moneys only on such authorization; no contract is binding upon the County unless the Council has formally approved the expenditure involved. After the outlays have been determined upon, the Council sets the rate of taxation. In case it is necessary for the County to borrow money, the Council may authorize the loan in an ordinance stating the purpose of the bonds. The arrangement of the details of the issue are left to the Auditor.

Of all the county officials the Auditor has the most responsible position. He is clerk of the Board of Commissioners and of the Council; his order alone may authorize the Treasurer to pay out county funds, but he can sign this warrant only in expending appropriations made by the Council, except in the case of money due the State, the School Fund, the City or Township funds, and a few other funds where there is small chance for the exercise of his personal discretion, and where the money does not really belong to the County. He is in close touch with the Treasurer, and keeps separate accounts for all appropriations and funds. The Treasurer is a little more than a mere custodian, for he must keep books to show the condition of the different funds, and he must refuse to pay any warrant if no money is available for the specific purpose for which it is drawn. He receives the proceeds of the bonds which the Auditor sells. Moreover, he may seize personal property and sell it if taxes are not paid. The third official intimately connected with the finances is the County Assessor. The Township Assessors turn in their reports to the Auditor, and from him the County Assessor receives them. It is his duty to go over these returns and to try to locate

omitted or sequestered property. He then reports to the Auditor who makes up the Tax Duplicate and hands it over to the Treasurer. It is also the Assessor's business to assemble the Township Assessors and instruct them in their duties. These three men, the Auditor, Treasurer, and Assessor, with two freeholders appointed by the Judge of the Circuit Court, constitute the County Board of Review, which hears complaints, equalizes valuations, and finally approves every assessment in the County.

There are several other County officers with important duties. The Recorder files complete lists and copies of all deeds, mortgage bonds, and indentures of apprenticeship. He also records the ear marks of cattle, sheep, and hogs, and the brands of horses. The Clerk of the Circuit Court keeps all the court records, handles money in connection with judicial business, maintains lists of county and township officers, and has custody of their bonds. The locations of corners made by the Surveyor are officially correct. He files the field notes and similar papers for the townships. The Prosecuting Attorney, whose constituency is not the county, but the judicial circuit, conducts prosecutions for felonies and misdemeanors and forfeited bail, in the name of the State. He resists applications for change of names, protects the interests of persons of unsound mind, and defends the county trust funds, if they become legally involved. The Sheriff can suppress a breach of the peace and he can arrest without a warrant, persons who commit offenses in his presence; other arrests he makes by authority of a warrant; he pursues and apprehends fugitives, manages the county jail and its inmates, and attends court and serves its processes. The Coroner has all the powers of the Sheriff in the latter's absence and holds inquests over the bodies of persons supposed to have met death by accident or violence. The Coroner is given his commission by the Governor. The terms of the Auditor, Recorder, Assessor, and Clerk are four years; those of the Prosecuting Attorney, Sheriff, Surveyor, Treasurer, and Coroner are two years.

The scheme of county government in Indiana is particularly notable because of its system of checks. In theory almost every official checks some other. The power to levy taxes, for example, is taken entirely out of the hands of the men who disburse the money. In the second place,

the county is the fiscal agent of the State and of the municipalities, for it is the County Treasurer who collects the taxes and turns them over to the agents of the other grades of government; and the County Board of Review considers every assessment and adjusts differences. In the third place, the County is the unit for the administration of justice, as a part of a judicial circuit. The Circuit Court is the chief judicial instrument of the State. The County is a very convenient administrative unit, but it is overshadowed in importance by some of the large municipalities.

The General Assembly.

The General Assembly of Indiana is very similar to the legislature of other states. It consists of two chambers: the Senate of fifty members and the House of Representatives of one hundred members. Altho the State Constitution would permit smaller houses, it limits the membership to these numbers. It is required by the Constitution, moreover, that the commonwealth be divided by the Legislature into senatorial districts and representative districts once every six years, on the basis of a census of all males of voting age. The representative districts elect Representatives every two years, and the senatorial districts choose Senators once in four years, but the Senators are divided into two equal classes, so that the terms of half expire each two years.

It is probable that every apportionment is a "gerrymander;" that is, the State is so divided that many districts will give small pluralities for one party while fewer districts will give large pluralities for the other. Thus it is brought about that in the General Assembly there is usually a considerably larger proportion of Representatives and Senators of one party than the voters of that party form of the entire electorate, or even of the two strongest parties. Several times the courts have declared these legislative apportionments invalid, because they have been so manifestly unfair.

A flagrant trick in most of the apportionments is the combining of some counties in such a way that the vote of the smaller is absolutely ineffective. Marion County is usually Democratic. At the apportionment of 1915 it had a voting population large enough to entitle it to five Senators, but not quite large enough for six; so the Democratic General Assembly gave Marion County five Senators, and also decreed that Marion should combine with Hamilton and Hend-

ricks Counties, which usually are Republican, in electing a sixth. Now Hamilton and Hendricks Counties might vote Republican by large majorities, and yet a comparatively small Democratic plurality in Marion County would decide the contest in favor of the Democratic candidate for these counties, for, according to the congressional registration of voters in 1913, Marion County had 84,731 voters, Hamilton County 7,170, and Hendricks 5,952, while the State had 792,625, or an average of 15,852 per senatorial district. Now if a definite portion of Marion County, containing fewer than 5,500 voters could have been combined in a district with Hamilton and Hendricks Counties, it would not have been so bad; but, as things stand, a Democratic plurality of eight thousand in Marion might overbalance a Republican vote of over ten thousand five hundred in the other two counties. In the 1915 senatorial apportionment there were five other instances of such a combination of counties. Politically, it is universally considered good form to gerrymander. Indiana is not particularly bad, altho it has achieved such a wonderful result as that obtained when, in 1892, 259,190 Democratic votes elected eleven United States Congressmen, while 253,668 Republican votes elected only two.

A visitor to the General Assembly does not notice evidence of exceptional ability on the part of the members, who seem to be, perhaps, a shade more keen than the average man. In 1913 the House of Representatives was made up of thirty-five farmers, twenty-five lawyers, six teachers, five merchants, three machinists, two druggists, two blacksmiths, two manufacturers, two salesmen, two newspaper editors, two insurance agents, and one each of the following: banker, carpenter, civil engineer, manager of a teachers' bureau, railroad inspector, street railway conductor, street railway agent, wood turner, locomotive engineer, live stock dealer, county treasurer, electrical engineer and retired merchant. One seemed to have no regular business. The Senate contained nineteen lawyers, five merchants, four physicians, three manufacturers, three newspaper editors, two farmers, two salesmen, and one each of the following: banker, civil engineer, coal operator, contractor, county treasurer, court reporter, dentist, druggist, life insurance agent, liveryman, retired lumberman, and combination physician and farmer. These lists show that while the farmers

are well represented in the House, they are scarce in the Senate, where lawyers compose nearly two-fifths of the membership. The laboring men are present, but in very small numbers; the manufacturers, store keepers, and bankers are few, altho probably in approximately fair proportion to the numbers actually engaged in these occupations. Then there is a miscellaneous representation from other callings.

Soon after the election of the members of the General Assembly, the Governor appoints two Representatives and one Senator to serve as the Legislative Investigating Committee. These men visit every state office and every state institution, receive reports from the persons in charge, inspect the work that has been done or that is in process, and then make up a report with recommendations for appropriations, which is referred to the finance committees of the two houses. This report is the basis of the general appropriation bill, which is one of the most important measures considered at each session. Meanwhile, there is always at work the Legislative Reference Bureau, which collects the laws of the United States and of the other commonwealths, indexes these and the Indiana statutes, files material relative to legislative and municipal problems, and renders expert assistance in the delicate task of drafting bills.

When the General Assembly comes together on the Thursday after the first Monday of January of every second year, it must organize. The Lieutenant Governor presides over the Senate, but the House elects its own Speaker. The presiding officers appoint the standing committees, of which, in 1913, the Senate had forty-six, with an average membership of about seven, and the House had fifty-four. Most of these committees actually consist of seven members, altho some have more and some fewer. Then, to make legislation physically possible, a great deal of outside help has to be hired: a chief clerk with reading clerks, engrossing clerks, and enrolling clerks to assist him; stenographers; doorkeepers to preserve order among spectators; postmasters; telephone operators; and pages. Since all of these persons receive rather large salaries for the grade of work, there are many applicants for each position.

The process of making laws is rather complex. Since every Senator and Representative naturally wants to do something for his district or for the State he is eager to

have his name appear as the author of an important bill. He, therefore, generally comes to the Capitol armed with several bills of his own making. If, however, one of his constituents desires the enactment of a measure in which the legislator is not particularly interested, or which he personally opposes, he may introduce the bill "by request." It is perfectly evident from the character of the occupations of the Representatives and Senators that most of them have not had the training necessary to equip them to draft laws properly. So probably the majority of the bills actually come from the pens of other men than their sponsors. The bill is "introduced" by being handed to the Clerk at roll call. It is read by title and is referred by the presiding officer to the committee which is considered by him most appropriate. This act of reference is in itself very important, for the presiding officer well knows the character of the committees, and he can easily bring about the defeat of a bill by entrusting it to a group of hostile men. It is extremely difficult to compel a committee to report a bill; indeed it is possible for the chairman to walk about with the bill in his pocket after the committee has decided to recommend the measure's enactment. The bill as it passes from the clerk to the committee is bound in a stiff paper cover that by its color shows in which house it originated. In committee the bill may be thoroly discussed or ignored. It may be that several bills covering the same subject have been introduced; then the committee may adopt any one of them, may alter one to suit its taste, or may draft a new bill better to meet the real need of the political situation. In working on an important bill the committee may give hearings at which any interested people may speak. The men who make a business of influencing legislation are often able by means of interviews with committeemen to prevent the reporting of a given measure or to have it so modified that it will be non-effective if it does pass, or to have it changed to meet their views.

The report of the committee recommending the adoption of a measure may be accepted by the House, in which case the bill is read a second time by title, and then made the subject of debate. During this debate amendments may be offered and adopted, and at its conclusion a vote is taken, by virtue of which, if favorable, the bill is sent to be engrossed, or written out by hand. If the vote is "to post-

pone indefinitely," it means that the bill is "dead;" it cannot come up again at the session.

After the bill has been engrossed it is again read, this time in full. The reading is done by a clerk with amazing speed, and is usually incomprehensible because of the haste and of the hubbub of important conversations between the members of the House, visitors, and lobbyists during the performance. After this reading amendments can be made only by unanimous consent. Of course the Chair may fail to hear an objection, but if the opposition to an amendment is considerable, the bill may be referred to a committee. This committee may make the amendment and sometimes reports within a minute, and the report of the committee may be adopted at once. In this way pernicious changes of a few words may be made. They are hard to detect and to point out because the members are unable to read them. House Rule 65 in 1913 required that "every bill reported formally by a committee, and such other bills as the House may direct, shall be printed, unless the committee reporting such bill shall recommend that such bill shall not be printed." This custom of printing bills makes the farce of reading by title harmless, and the wonderful vocal performance of the Clerk on third reading is a respite during which the Legislators may sort their mail, chat, rest, read the newspaper, or argue with each other. But the amendment on third reading is one that the members cannot properly comprehend, and it is not uncommon for them to crowd about the Clerk in an effort to catch his words. After the final debate, in which the original sponsor of the bill may elucidate its meaning, or members may explain their votes, or some men may even make really argumentative speeches, the final vote is taken. The roll is called alphabetically. Each party recognizes one man near the head of the list who is coached by the leaders, in order that the other members of the party may vote as he does. Of course, there are a great many bills that are not party measures, and then this example is not necessary. Immediately after the calling of the roll the members may change their votes if they have made mistakes and there are sometimes as many as a dozen such metamorphoses. The presiding officer then announces the vote. If this vote is favorable the bill is carried across to the other House and given to its clerk. In the second House the process of the first is repeated.

If the second House has adopted the bill with some new amendments, it is returned to the first. The first House may then accept these amendments, or it may "non-concur", in which case it is usual to move the appointment of a conference committee. Conferees from the two bodies generally succeed in arriving at some sort of a compromise, which both Houses almost invariably adopt. As soon as the bill has been finally accepted by both Houses, it is enrolled, or carefully written out in long-hand. In this process it is possible for a careless or a corrupt copyist considerably to modify the meaning of a law by a slight change, such as the substitution of one conjunction for another. The enrolled bill is taken to the Governor, by whose signature it is made law. If, however, he disapproves the measure, he returns it with his objections to the House in which it originated. His objections are then considered and spread upon the minutes. If, on reconsideration, this House votes in favor of the measure, it is transmitted to the other House, and if this body too, by a majority vote, approves the bill, it becomes a law. A bill which the Governor keeps for three days, Sundays excepted, becomes law even if he does not sign it "unless the general adjournment shall prevent its return, in which case it shall be a law, unless the Governor, within five days next after such adjournment, shall file such bill, with his objections thereunto, in the office of the Secretary of State, who shall lay the same before the General Assembly at its next session in like manner as if it had been returned by the Governor. But no bill shall be presented to the Governor within two days next previous to the final adjournment of the General Assembly." When a Governor personally does not approve a bill, but does not wish to place himself in definite opposition to his party, he sometimes allows the measure to become a law without his signature by holding it three days. The veto provision in Indiana's Constitution is certainly wise in permitting a majority of the Legislature to override the Governor's veto, it is defective in allowing him so little time to consider the bills. Of course, he may become acquainted with their provisions during their passage, but he may be hard put to find time for investigation, and he ought to have a greater opportunity for consideration. Again, it is a mistake to compel the Governor to approve or disapprove the bill as a whole. He should be allowed to veto a single section. It

may well be that measures, desirable on the whole, contain provisions that neither a majority of the Legislature nor the Governor approve, but which have held their places in the bill because its proponents could not secure its passage without placating some headstrong element by the obnoxious section. The possibility of a veto by sections would bring these points clearly to an issue, and would probably improve legislation.

From the Governor the enrolled law passes to the Secretary of State, who is responsible for its safekeeping forever. He edits the acts of the session, has them printed and sends them to the Circuit Court Clerks for distribution among interested people. As soon as the last Clerk has received his allotment the Governor by proclamation puts the laws in force. If, however, it seems unwise for a law to be so long non-enforceable it is customary to "declare an emergency," and the statute is then law as soon as the Governor has signed it.

At every session of the General Assembly from a thousand to fifteen hundred bills are introduced, and, roughly, from three to five hundred are passed. Since it is manifestly impossible for the individual members to give adequate consideration to many of these proposals, it is important to note how they determine their votes. In the first place, there are a goodly number of measures of no political significance, measures for the relief of certain individuals, measures to validate some bond issues, made in good faith, but containing some legal flaw, measures to legalize some acts in which the officials did not comply with all the formalities. Other non-political measures are of greater general importance. A new drainage law, an amendment to the labor code, a measure for the benefit of farmers may be so obviously desirable that there will be no serious opposition, and a mere explanation by its sponsor will secure its enactment. The men on the committee are often fairly well acquainted with the subjects they have to consider, and their advice may be trusted.

But when it comes to acts that involve important determinations of policy, or when there is party interest at stake, the situation is different. Then oftentimes the lobbyist strains every nerve to influence committees and individual members, and the party has to adopt an official attitude. The leader of each party in the House calls a

"caucus," which every member of the party is expected to attend. At this caucus it is decided whether the party will support or oppose certain measures. There may be real debate, or the tacitly recognized representatives of some boss may precipitate an immediate vote; but whatever the method employed, every man who attended the caucus is pledged to vote in accordance with its decision. Thus, for example, there may be in the Senate thirty-five Republicans and fifteen Democrats. All the Democrats and fifteen of the Republicans may be opposed to a certain measure; that is, thirty out of fifty Senators disapprove it. Yet, if the Republican caucus decides by the vote of twenty to fifteen to pass the bill, it will carry by the majority of thirty-five to fifteen. Thus it is possible for the real desires of the majority to be defeated. There are several reasons why the Republicans who oppose that bill attend the caucus. Some of them are really loyal to party; some of them want to be considered loyal; but more are well aware that if a man is absent from a caucus and votes against his party he cannot hope to secure the passage of any of his bills, and if he succeeds in accomplishing nothing his constituents will be dissatisfied. So, because the legislators know that they must work with a group if they desire to accomplish their own little ends they attend the caucus and consent to the tyranny of its provisional vote. The caucus system seems to be a necessary adjunct to legislative government.

Before and after the sessions of the caucuses, at all times, the lobbyists are at work. Altho the most powerful and skillful lobbying is doubtless done entirely away from the legislative halls, thru the bosses, men are actually paid to go to the individual legislators and to induce them to favor or oppose certain measures. The activities of these paid men were so obvious that the 1915 Assembly, by the second law it passed, tried to regulate them. The new statute defines a "legislative counsel" as "any person, firm, corporation or association employed for compensation given directly or indirectly to appear before a committee of the General Assembly, of either House, for the purpose of making arguments or examining witnesses, or any legal counsel employed regularly or temporarily by any person, firm, corporation, or association, who promotes or opposes legislation by the preparation of written briefs or statements submitted to the members of the General Assembly, or the com-

mittees thereof, or of either House." A "Legislative Agent" is "any person, who for a compensation given directly or indirectly, promotes or opposes legislation by any other means than those set forth in the preceding paragraph, especially by personal interview with members of the General Assembly, or by personal communications with members of the General Assembly or the Governor of the State of Indiana: provided, a legislative agent may act as a legislative counsel if so authorized by his employer." Within one week of the date of their employment these lobbyists have to register with the Secretary of State, giving the exact nature of their business, the names of their employers, and other important data. The list of the registered lobbyists with all this information is open to inspection. Upon registering, the lobbyist is given a certificate which he may be required to exhibit by any member of any committee before which he desires to appear. Within thirty days after the close of the General Assembly, each person, firm, or corporation that has employed a lobbyist must file with the Secretary of State an itemized statement of all expenses incurred in connection with the employment of this agent or counsel. These reports, which must be upon prescribed forms, are public records. It is forbidden to pay fees contingent upon the success of the work of the lobbyist. Lobbyists residing beyond the jurisdiction of the Indiana courts, must give bond.

It must not be inferred that there is necessarily anything wrong in employing lobbyists. Indeed, it is highly desirable that the interested parties ably present their views to the influential legislators, for it is only by encouraging thoro consideration of important matters that the General Assembly can hope to act wisely. It is a great misfortune that very frequently the general public has no clever representative while all too often the interests opposed to the community well being can afford to employ the most skillful men. The really objectionable part of lobbying is not the arguments addressed to legislators and committees, but the unfair coercion and the secret rewards. These are hardest to prevent.

The closing days of the session of the General Assembly have no features that command admiration. The Constitution limits the regular session to sixty-one days and special sessions that the Governor may summon to forty;

but an extra session is unpopular, because of the expense to tax payers. This limitation of the session entails a tremendous stress in the last few days. The meetings are continued from ten A. M. till midnight, with recesses for meals; the men are worn out with this strain, and bills are rushed to passage without due consideration. In the past there has been a great deal of horse play, but in 1915 the House of Representatives passed a resolution that prevented most of the inane tricks and practical jokes. After all, if there is little in the personnel and output of the General Assembly for Indiana to be proud of, her Legislature is probably no worse than the average, and occasionally it achieves a brilliant piece of lawmaking.

State Officials.

The highest executive powers of the State are vested in the Governor, who is elected for a term of four years and who cannot succeed himself. The Governor has certain legislative functions: he may call a special session of the General Assembly; he performs the final act of lawmaking by signing or vetoing bills and then proclaiming the statutes in force; and he is expected from time to time to give to the General Assembly information as to the condition of the commonwealth and to make recommendations for action. As a real executive, he is the head of the military and naval forces of the State, which he may use to "execute the laws, or to suppress rebellion, or to repel invasion;" he is commissioned to transact "all necessary business with the officers of the government, and may require any information in writing from the officers of the administrative department, upon any subject relating to the duties of their respective offices." In other words, he has a general supervision over the conduct of the various executive departments, and he must "take care that the laws be faithfully executed." Finally, he exercises a wide appointing power under the Constitution and by virtue of legislative enactment. Another branch of the Governor's activities is judicial in essence, for he may grant pardons, commutations, and reprieves to all offenders, except those convicted of treason or found guilty after impeachment, but in this power he is limited by the legislative creation under the authority of the Constitution of a special board to have charge of pardons and paroles. The Governor is, then, an official of wide powers.

If the Governor is incapacitated, his work is done by the Lieutenant Governor, elected at the same time for the same term, whose usual function is to preside over the Senate.

The Secretary of State is a man of considerable responsibility, for he is entrusted with the keeping of the enrolled copy of the Constitution, of the enrolled acts of the General Assembly, of deeds, conveyances, and contracts belonging to the State, of official bonds of the officers, of records of the acts of the Governor, and of the decisions of the Board of Pardons. He is required to furnish a copy of any law or act on demand, if he may properly give it, and to keep his records in such order that they may be inspected by the authorized committee from the General Assembly, and that they may be available to the Governor. Under the supervision of the Secretary of State is the work of filing articles of association or the chartering of corporations, the licensing of automobiles, the editing and publishing of the statutes, and a great many other matters of routine. He is ex-officio member of several commissions, of the Board of Printing, for example, and he is able to exercise some important discretion. His task of keeping many records and his opportunity corruptly to altar or lose a statute make the Secretary of State a man of great power.

Perhaps overshadowing the Secretary of State in importance, because of his larger discretionary powers, is the Auditor of State. As is the case of the Secretary and Treasurer, his term is two years, and an individual may not hold the office more than four years in any six. In the first place, the Auditor must see that all funds due the State are collected. To this end he may examine the accounts of all persons who receive money for the State, direct the collection of such funds, and institute suits to recover sums due the commonwealth. Then he has extensive duties connected with expenditures, for he draws warrants on the Treasurer for the payment of funds appropriated by law, he examines and settles claims against the State, and he makes an estimate of the necessary budget for the General Assembly. Moreover, as the chief accounting officer he keeps the records of the financial transactions of the commonwealth with the Federal Government, with other States, with officers of the State, and with the County Treasurers; he opens a separate account for each fund provided for by

legislation; and he keeps records of the leases, bonds, mortgages, and other securities in which the State is interested, unless the law has made some other special provision. He is required to prepare a complete report for the General Assembly and to give the Governor information upon request. Finally, the Auditor has under his supervision the Insurance and Banking Departments, which examine and regulate the banks, the trust companies, the building and loan associations, and the insurance companies. Altho it is of the highest importance to the individual and collective welfare that these financial institutions be thoroly sound, the law necessarily allows wide discretion. In addition to the above functions, the Auditor serves on the State Board of Tax Commissioners and acts with the Governor and Treasurer as a committee to pass upon the necessity of authorizing temporary loans.

The Treasurer of State receives the revenues from bond sales, taxes, land sales, departmental fees, and other sources of State income. He may disburse these funds only upon the presentation of warrants signed by the Auditor. The Treasurer is required to account for all money that comes into his possession, to prepare monthly statements for the use of the Auditor, to publish in two Indianapolis papers an annual statement, and to make full reports to the General Assembly. Since he is entrusted with such large sums he is compelled to give bond for seven hundred thousand dollars.

The State Attorney General also is elected for two years. He is required to give his legal opinion to the Governor upon request, and to other State officers upon matters pertinent to their duties and functions; he must prepare an opinion for either House upon the constitutionality of any law; but he is not required to render any other advice. He keeps a record of all these opinions. The Attorney General must defend the State officers in action brought against them as officials, and he must defend all suits involving the commonwealth, upon due notification thru proper channels. But his court activities are not confined to cases in which the State is a party, for he is commissioned to look after any suits in the Supreme Court in which the State is interested. The Attorney General is able to exercise a great deal of influence on the execution of the laws. If he formulate an interpretation of a law, the department is practically

bound to follow his opinion. In this way it is possible for a corrupt, interested, or inefficient Attorney General to vitiate a great deal of legislation.

There are many other State officers, some elective, as the Superintendent of Public Instruction, the Geologist, the Statistician, and the Prosecuting Attorneys, and others appointive, like the Entomologist, the Veterinarian, the Librarian, the Supervisor of Oil Inspection, the Adjutant General, and the Quartermaster General. These men, however, determine policy in a very small way, if at all. There are also the appointive commissions on Education, Forestry, Health, Taxation, and Public Utilities. These will be considered in other chapters, except for the Public Service Commission. This board of five men is the successor, with widened powers, of the old Railroad Commissioners, for it can supervise all the public utilities in the State, regulating their charges, services, stock issues, and methods of accounting. These powers are enough to determine the life or death of the utilities in most instances, as the Commission may procure, thru the proper legal proceedings, the forfeiture of the indeterminate franchises under which most of the utilities are now operating. The results so far achieved are few, but important. The Commission stands between the public and the corporations, procuring reasonable rates for both, and thus saving the utilities from bankruptcy and the customers from extortionate charges. Another achievement has come thru expert advice offered to the managers of the small plants, who are apt to be out of touch with the most up-to-date methods, and who frequently visit the office in the State House and there learn new economies in production and new means of procuring reliability. This Commission can do a vast amount of good, but it has great temptations to play into the hands of the large utilities.

Impeachments.

It has been pointed out that there is much incompetency in the ranks of the office holders in Indiana. Perhaps the most startling example of unfitness for public position was furnished by Professor Esarey who cites the foreign born road supervisor who thought that the best way to drain a highway was to put a ditch down its center, and who ruined the roads in his district. Officers may be worse than in-

competent, however, and it may become necessary to remove them. This is accomplished by the process of impeachment.

All State officers, including Judges and Prosecuting Attorneys, are impeached by a resolution of the House of Representatives, the "articles of impeachment" being filed with the president of the Senate. The Senate appoints a day on which the defendant may appear and plead orally, or may make written answer to the charges. If the written answer is unsatisfactory, or if the oral plea is "not guilty," the Senate tries the impeachment, a two-thirds vote of all the Senators being necessary to convict. The judgment of the Senate may be the suspension of the defendant from office, or his complete removal, coupled with disqualification from ever thereafter holding a post of honor or profit in the State. During the trial, a substitute appointed by the Governor performs the duties of the defendant's office. In case the Governor or Lieutenant Governor is impeached, the Chief Justice of the Supreme Court presides over the trial sessions of the Senate.

District, county, township, or municipal officers are impeached by action of the Grand Jury, before whom the accusations must first be brought. The impeachment is tried in the Circuit Court by the Prosecuting Attorney. The trial must be by jury, the appeal may be taken to the Supreme Court. Judgment may be removal from office.

The method of impeachment is very cumbersome, yet probably no better method of removing from office can be devised short of the power of the people to recall the incumbent. In general a court decision would be more trustworthy than a popular vote, yet there have been late examples of the fact that Indiana judges who have been elected by the same party as the accused officials, are very apt to regard with slight favor the charges brought against these men. On the other hand, if the people do remove from office individuals who have committed no sin, but who have adopted policies widely unpopular, no wrong is done, as the men have been placed in office to serve those people. Of course the policy of the individual removed may have been much better conceived than that of his constituents or of the successor whom they elect, but the point is this: there is no better arbiter than the voters, and if any man or group of men have a right to rule it is the voters.

Direct Primaries.

For decades there has been dissatisfaction with the methods used by the political parties in choosing their candidates for offices of all grades. It has been felt that certain methods had been devised to bring it about that the men nominated on all the tickets stood, not for the things desired by the voters, but for the fulfillment of the wishes of the bosses. As a matter of practical fact, the voter could decide only among the candidates put in the field by the organizations, none of whom might be in the least to his liking. After years of effort the 1915 General Assembly was induced to pass the "Jones Direct Primary Law." By the terms of this act the existence of political parties was frankly recognized by regular rules for the selection of the State, Congressional District, County, City, and Precinct Committees, based on the election of the precinct committeemen by ballot at the March primary. A man may be nominated for any office, save that of President and Vice President of the United States, United States Senator, Governor, or other State official, by filing with the Secretary of State or with the Clerk of the Circuit Court, or with the City Clerk, depending on the constituency, a petition signed by a required number of voters. The name of this aspirant is then printed on the "Primary Ballot" of his party, along with the names of the other candidates for the nomination, and it is voted upon by the electors of the party. Men who care to affirm, if challenged, that at the last general election they supported the majority of candidates of the party, or, if first voters, that, in general, they intend to support that party, are eligible to participate in its primary. But the only person who may challenge a participant in the primary is, according to the decision of the State Supreme Court, a member of the party at whose primary the individual attempts to vote. For each nomination the voter may express his first and second choice of candidates. Elaborately expressed but simple rules for the placing of the names upon the ballots and for counting the votes are designed to procure absolute mechanical fairness and to secure the nomination of candidates who are satisfactory to the largest number of voters of their respective parties. The delegates to the State Convention of the party are to be selected at the March primary. They are, as of

old, to adopt a platform of principles, to nominate State officials, and to select delegates to the National Convention; but if a majority at the party's primary shall have favored the candidacy of any one man for Governor or Senator, this individual is to be the official nominee of the party and the Convention may nominate no other; and if a majority of the electors in the Primary shall have declared in favor of any individual for President or Vice President, the delegates from the party in Indiana are to be bound to vote solidly for this individual as long as his name may be before the National Convention. Thus the law aims to secure the popular will in the nominations of the candidates for all offices and in the control of the party committees and delegates. An attack has been made upon the law in the courts on the ground of the expense of the primary elections, on the supposition that the statute destroys the secrecy of the ballot, and on the charge that it destroys the freedom of the ballot by requiring of candidates for nomination the payment of arbitrary fees. There are many other counts urged against the law. The State Supreme Court has held the fees unconstitutional and has upheld the other features of the law. The direct method of nominating candidates for office is not a sure cure for organization rule; yet it does give the voters a better chance to express their will than they have had.

Courts.

The administration of justice in Indiana is in the hands of a rather complicated system of courts. The functions of the Justices of the Peace and of the Mayors' Courts have already been noted. The municipalities have "City Courts" to try violators of their ordinances and persons guilty of petit larceny and other minor offenses. The main task of administering justice, however, rests upon the Circuit Courts which have jurisdiction in one or more counties, holding sessions in each. There is one judge to each circuit, elected for six years by the voters of the included counties. A man accused of crime is usually first tried in the Circuit Court; wills are there probated and contested, injunctions granted, names changed, and civil cases decided. The records of the Circuit Court are kept by the Clerk of the Circuit Court elected in each County. The State is represented in trials by the Prosecuting Attorney, an official whose work

was mentioned in the description of county government, altho his constituency is really the judicial circuit.

The Court appoints two men as jury commissioners, who select from the tax duplicate twice as many names as the number of jurors who will probably be needed at the next term. The list may not include a man who is not a freeholder or a householder. These names are given in a locked box to the Clerk of the Circuit Court, and he draws out for each term enough men to make up the Grand Jury of six and the Petit Jury of twelve members. If challenges are expected, more names may be drawn, in order that no time may be lost in completing the panel. The Grand Jury hears incriminating evidence and determines whether there is enough damaging testimony to warrant the holding of a person for trial; its report bringing charges against an individual is called an indictment. The Petit Jury determines the issue of a trial and has, according to the Constitution, the right to determine both the law and the facts.

In some of the larger circuits there has been too much work for the ordinary Circuit Courts; so the Legislature has provided for Superior Courts, consisting in some cases of more than one judge, and exercising civil jurisdiction. If the Superior Court has several members, these judges may sit individually in "special term," or together in "general term," but there is no appeal from the special to the general term. In Marion, Allen, and Vigo Counties it has been necessary to organize Criminal Courts, to relieve the other courts of all the criminal cases. These Criminal Courts consist each of one Judge elected like the judges of the Superior Courts for a term of four years. In Indianapolis there is a special Juvenile Court, but elsewhere the Circuit Judge acts as Juvenile Judge, in addition to his regular duties. The Judges of the Juvenile Courts appoint probation officers and allow discreet persons to act as volunteer assistants. Trials of boys under sixteen and of girls under seventeen, as conducted in these Juvenile Courts, are exceedingly informal, and the judgment is one that aims to give the young offender a chance to reform without sending him to jail. In this way more good is accomplished than by giving the child his constitutionally guaranteed trial by jury.

If an error has been made by the Judge in a Circuit, Criminal, or Superior Court, the case may usually be appealed

to the Supreme Court or to the Appellate Court. Each of these courts consists of five justices elected by the voters of the State as a whole from five districts, one justice in each court being chosen from each district. In certain cases, such as prosecutions for misdemeanors, actions involving money judgment of not over thirty-five hundred dollars, actions for the recovery of specific personal property, actions between landlord and tenant involving possession of property under lease, and some actions involving estates, the Appellate Court has exclusive jurisdiction; and where it has exclusive jurisdiction it has also final jurisdiction, unless one of the litigants can raise a point of equity or of constitutionality, or unless the suit involves the title to real estate. This Appellate Court was formed to relieve the Supreme Court of part of its excessive business.

The Supreme Court is not only the highest court of appeal, except in those classes of cases expressly assigned by the General Assembly to the Appellate Court as final arbiter, but it has original jurisdiction in a large variety of litigation, where the matters involved are of great importance or of very wide interest to the State.

Summary.

As this chapter has been almost entirely descriptive no attempt will be made to summarize. It may be pointed out, however, that Indiana has carried to an extreme the principle of rotation in office. The Governor may not succeed himself in office, and many of the State and County officers may not serve three consecutive terms. Moreover, the system of government has grown more complex in the course of time. The Township Advisory Board and the County Council were established in order that the administrative officers might be held in check by another body in control of the tax rate; the political parties have been somewhat regulated by the registration of voters, and by the direct primary; the Circuit Courts had to be helped out by Criminal Courts, Superior Courts, and Juvenile Courts, while some cases, such as the Constitution allowed have been taken from the jurisdiction of the Supreme Court and given to the Appellate Court. Finally, the General Assembly has been forced to acknowledge its inability to legislate concerning the details of the public utilities, and so a Public Service Commission with wide powers has been

formed. Indeed, the complexity of the government of this State and the extent of its activity in caring for the public weal is difficult to comprehend. This complexity, combined with the fact that the determination of policy means thousands of dollars to certain business interests, makes possible a thing known as machine rule. The result is that the cities are inefficiently, if not corruptly, governed, and that the Legislature is controlled by a minority that happens to constitute the majority of the party in power. The remedy lies partly in making possible the control of office holders, and partly in finding some way to prove to the honest and intelligent voter that he has an interest in politics that makes it worth his while to initiate and continue a ceaseless fight for honesty and efficiency in Government. It is impossible to create this conviction of interest until the system is so changed that the average man feels there is a possibility, nay, a fair chance for the honest voter to express himself effectively.

CHAPTER IX.

Finances

In the chapter on Government it was shown that the one time arbitrary power of the Township Trustees and of the County Commissioners has been limited by the creation of new bodies that control the tax rate and appropriate the public funds. In other words, the power to raise and to spend money is looked upon as the most vital thing in government. It is, therefore, well worth while to devote a few pages to a description of the methods of handling public funds in Indiana, and to point out incidentally some of the reasons why the method of taxation is becoming one of the most acute of the problems in the State.

In 1891 Indiana completely revised her revenue laws and stood in the van of the states so far as taxation was concerned, but since then she has made very little progress and one by one the other commonwealths have slipped by her until now her system is certainly antiquated. Part of the blame lies in the Constitution which requires that "the General Assembly shall provide, by law, for a uniform and equal rate of assessment and taxation; and shall prescribe such regulations as shall secure a just valuation for taxation of all property, both real and personal, excepting such only for municipal, educational, literary, scientific, religious, or charitable purposes, as may be specially exempted by law." In short, it is made imperative by the fundamental law that all property not belonging to the small classes which may be specifically exempted, be assessed and taxed at the same rate. The pernicious results of this provision will appear as the exposition develops. Another part of the blame falls on the General Assembly in its attempts to interpret the Constitution and to apply it, and a third portion of the trouble has been due to the inability of the voters to see where their real interests lie.

The Poll Tax.

The law requires that every male between the ages of twenty-one and fifty years shall be listed at his place of residence and required to pay a poll tax. This tax varies from one dollar to over six, according to the location of the home of the payer. A more inequitable tax can hardly be conceived. In the first place, the payment is in no imaginable way based upon the ability of the individual. The poorest and the richest are alike before this law. In the second place, there is no good reason for not levying upon women as well as men, if individuality is to be a basis of taxation, for it is as certain that there are women well able to pay a poll tax, as that there are men who have not the means. The sweeping condemnation of the poll tax, however, fundamentally rests upon the fact that there is no theory of fair dealing, of justice in its highest sense, to warrant the laying of an impost on persons because they are living and have attained a certain age.

Exemptions.

The other main base of taxation is property. Real property consists of "all lands within the state and all buildings and fixtures thereon and appurtenances thereto, excepting in cases otherwise expressly provided by law." Practically everything else is personal property. The Constitutional clause allowing exemptions has been stretched to the breaking point in finding objects to exempt from taxation. It is undoubtedly wise to free from taxes property of the United States, the state, the counties, the municipalities, and schools, for these things are supported by taxation, and to assess them would be sheer folly and useless expense. Likewise, it is simple prudence to exempt the bonds and notes issued by the state or its subdivisions. There has been a great deal of objection to the issuing of tax free bonds, especially those for financing gravel roads. These bonds often sell at a premium. If they were made taxable the interest rate on the actual selling price would have to be made far higher, so that what was gained in revenue would be paid out in the additional interest. Furthermore, if the exemption were abolished, men who have been induced to purchase these bonds would be tempted to invest in foreign securities that could be sequestered.

Lands and buildings used for educational, literary, scientific, and charitable purposes, land purchased with the bona fide purpose of erecting buildings for their use, and the endowments of these institutions, churches, their furniture and parsonages, and bequests for certain charitable, religious, and educational purposes, seem to be, on the whole, wisely omitted from the tax duplicate. To exempt the land, not exceeding one acre, the buildings and the improvements, and the personal property of Greek letter fraternities connected with colleges and "under their supervision" is highly undemocratic. The law allows the students rich enough to belong to these bodies, whose activities are essentially sociable rather than religious or educational, to escape that contribution to the state which poorer students, forced to room in private houses, have to make indirectly in their room rents. As the exemption of the college Greek letter fraternities is certainly unjustified, that of dormitories built by churches for the accommodation of college students, but not under the immediate direction of the college authorities, and that of the property of other fraternal orders is also wrong. There is no reason for exempting any institution that does not contribute in some tangible way all of its resources to the social uplifting of the community. Lodges are in many cases of very questionable value to the community; rather is their function sociable, the affording of a good time to the members. As it would be impossible practically to distinguish between the orders worthy of exemption and those unworthy, it is the only wise course to tax them all.

Finally, the law exempts mortgaged real estate up to an amount equal to the mortgage, but not exceeding seven hundred dollars or one-half of the value of the real estate. If then a man owns a ten thousand dollar farm on which there is a four thousand dollar mortgage, he has to pay taxes on ninety-three hundred dollars, or on thirty-three hundred dollars more than his equity, his actual property. Thus the farmer who is trying to pay for his farm or is borrowing to improve it, pays taxes on property which he really does not own. At the same time the holder of the mortgage is taxed on the full value of the mortgage. It would be simply fair to exempt the mortgage entirely, or else to value the farm at its equity value to the owner, provided the mortgage is registered. Thus it is apparent that the

law makes some exemptions that are certainly wise, some that are certainly unwise, some that are of questionable wisdom, and one that is grossly inadequate.

Assessment.

With certain exceptions, that will be noted later, the real estate and personal property are both made to yield their contribution to the state thru the general property tax. Every four years each township elects a Township Assessor, who may appoint deputies to aid him in the work of fixing the values of the property. The county Auditor gives him a list of the lands and owners, from which he makes a valuation of real estate once in his term, but every year he visits the individual citizens and secures a list of all their personal property at its fair price at a voluntary sale; at this annual round he also assesses any improvements on real estate. The valuations of personalty are made between the first of March and the fifteenth of May, and the owner of March first is taxed. The Township Assessor must hand over his completed blanks to the County Auditor before the first Monday in June. In general it may be said that the taxes on real estate have to be paid at the place where that property is situated and that those on personal property are to be paid by the owner at the place where he resides, but there are many exceptions to the latter rule.

All of the County Assessors in the state assemble for an annual conference in Indianapolis, at which meeting the problems of assessment are discussed and the State Board interprets the laws. On his return, the County Assessor calls together the Township Assessors and communicates to them his instructions. The County Assessor receives the returns from the Auditor and examines them thoroly, making any additions he can be sure of. If he thinks that property has been concealed, and can persuade the County Commissioners to furnish the funds, he may visit other places to investigate. After he has checked the work of the Township Assessors, the County Assessor reports to the Auditor, but he may make special reports at any time that he discovers any property which has been omitted.

The County Board of Review, consisting of the County Assessor, the Auditor, the Treasurer, and two other freeholders appointed by the Judge of the Circuit Court, next

takes up the returns and canvasses them, altho the law requires a thoro examination the work is often poorly done. This Board may change any assessment, may order a re-assessment, in any Township, and must pass separately on every assessment. In determining values, the Board may examine witnesses under oath, and it sits to hear complaints of persons who think themselves aggrieved. When the Board, whose session is limited in length according to the population of the county, has affixed its valuations on all the property that comes within its jurisdiction, the County Auditor may safely begin work upon the tax duplicate. This list of taxable property owned by each individual must be given to the Treasurer before the first of January, and an abstract forwarded to the Auditor of State. The County Auditor may add property that he learns has been omitted, and he is obligated to correct the duplicate at frequent intervals.

On the first Monday in April, thirteen months after the assessment was originally made, the State Board of Tax Commissioners, consisting of the Secretary of State, the Auditor of State, and three men appointed by the Governor, meets. This Board must equalize the county valuations, after due opportunity for interested parties to present their views. It may happen that in one county all property has been assessed at an approximate average of fifty per cent of its fair market value, while for the state as a whole the average has been fifty-five per cent. Then the State Board may order that particular County Board of Review to raise all assessments in its jurisdiction ten per cent. Of course all property is nominally assessed at one hundred per cent of its fair market value, but no one pretends that this is actually the case. Indeed, so far is it from the truth that one year, for example, the State Board actually passed around the hint that money in the bank should be set down at seventy per cent of its actual amount. Nevertheless, the State Board has accomplished a great deal of good by bringing about an approximate equality between the assessment rates in the different counties. Equalization, however, is not the sole function of the State Tax Commissioners, for they are a final court of appeals as to assessments; and to them any one dissatisfied with the decision of his County Board of Review may turn for relief. In case of such appeal the State Board may actually make the assessment of

the property in question. Moreover, at its annual meeting the Board sets the valuations upon railroad track, improvements and rolling stock, palace car companies, express and fast freight companies, telephone and telegraph companies, and some other classes of firms and corporations. In the case of companies engaged in transportation, or in the transmission of intelligence, the real estate is assessed locally by the Township Assessor, but the State Board determines by calculations starting with the stock and bond quotations the total value of the corporate property within Indiana, and then apportions it between the counties and municipalities on a mileage basis. Thus the great part of the assessment of these corporations falls upon the State Board.

The assessment of corporations involves other important points. Foreign insurance companies pay to the state three dollars on every one hundred dollars of premiums received in Indiana after the Indiana losses have been deducted. This payment is made every six months. All domestic corporations not otherwise provided for make annually a statement to the County Auditor on forms prescribed by the Auditor of State. This statement is presented by the County Auditor to the Board of Review. This Board then puts a value upon all capital stock, privileges, and franchises. If this capital value exceeds the value of the real and personal property as assessed, the difference in values, or "corporate excess" also is taxed. Since the company pays taxes, the owner of stock in an Indiana Corporation is not obliged to include it in his list for the Township Assessor. Banks are similarly taxed. The President and Cashier must give to the County Auditor a sworn statement of the number and the market value of the shares and of the names of the owners. Then the County Board of Review fixes the final valuation of the institution. The stock is then assessed to the owners at the location of the bank. As a rule the stockholders avail themselves of the privilege of having the bank pay the tax and deduct it from the dividends.

Many details in the process of assessing have been passed over in this brief description, but it will be noted that nearly every valuation is checked many times. Altho the County Auditor, the County Assessor, and the County Treasurer are always on the alert to detect omitted property, some counties have found it advantageous to employ

tax ferrets, men whose business it is to locate possessions which the owners have not reported. Notwithstanding all of these precautions of the officials, and in spite of the oaths required of individuals assessed, a great deal of taxable property is not reported. The trouble is this: in order that a county may have a small share of the state burdens the county officials are sorely tempted to minimize the valuations. In other words, as the state tax can be escaped partially by returning low county valuations, tax payers and officials tacitly coöperate to evade the burden. But, since the same principle holds true among the townships of a county, each Township Assessor is likely to prove his fitness for office by reporting low values: thus he gains popularity. Finally, there are always numerous men who are ready to lie: they conceal their securities or jewelry in a safe deposit box, they understate the value of their possessions, or they manufacture debts to counterbalance their assets. As they are not taxed on what they own, an extra burden is thrown upon the absolutely upright. In self-defense the honestly inclined individuals have to begin concealing part of their wealth. Expenses continue to increase, so the tax rates rise until in several cities they have reached five per cent. This is almost as much as money will earn when safely invested. In such circumstances a man who will report all he owns is a fool for allowing himself to be imposed upon by his dishonest neighbors; a man who fails to report all his belongings perjures himself. The result has been reached that the owner of real estate whose property cannot be hidden, and the farmer whose implements and stock cannot be concealed is heavily taxed while a man whose wealth is invested in foreign securities is permitted to escape the burdens. Today, as an example, much Indiana money is sent east to be invested, while the foreign insurance companies hold the mortgages on many Indiana farms.

Not only is the system one which necessarily conduces to dishonesty, but the assessors are inferior men. Two and a half dollars a day is not sufficient to command capable brains and the consequence is the employment of a small army of worn out politicians to determine what people own. The "general property tax" in Indiana is, therefore, a failure from the administrative point of view, because it makes concealment easy and extremely advantageous.

Impossible from the administrative standpoint, "The general property tax" is ethically unjustifiable. Different forms of property yield income at vastly different rates, and therefore, should not be taxed uniformly. Does it seem fair to tax at the same rate the library of the college professor, who uses his books as a tool in earning his living, and that a lady who uses hers for amusement only, and the diamonds of the belle and the thrashing machine of the farmer? Is it equitable to assess at the same rate the home of the mechanic who is desperately struggling to increase his earnings by a hundred dollars or so a year, and the mansion of the rich man who is easily and rapidly accumulating wealth? The burden of the payment depends not primarily upon the amount, nor mainly upon the rate, but essentially upon what is left after the settlement. To double the mechanic's tax may wipe out his entire margin for saving, to double that of the rich man may entail no sacrifice at all, and at worst means the cutting off of some luxury not essential to his life. On the other hand, halving the rate of the mechanic might enable him to purchase enough life insurance to assure the independence of his family after his death, while cutting in two the rate for the rich man might allow him an extra span of blooded horses, or another bond in his safe deposit box. There is no justice in the general property tax.

Rates and Collections.

It has already been noted that the rates of taxation for the smaller divisions of the state are fixed by the local authorities. Suppose, for example, one lives in a city. The rate he pays is fixed as follows: the City Council has determined the municipal rate, the Township Advisory Board has set the township rate, and the County Council has fixed the county tax. All these rates, together with the rate fixed by the state authorities and that determined by the local School Trustees, are certified to the County Auditor, and he enters the amounts due on the tax duplicate. To this will be added the poll taxes levied by the state, the county, the township, and the city, and a dog tax if he possesses such property. Then there may be a special assessment to pay an installment on a sewer, sidewalk, or road that has benefited the real property which he owns.

It will be remembered that the completed tax duplicate was left by the Auditor in the hands of the County Treasurer. This official has an office at the county seat and may open temporary offices in other towns for the convenience of their inhabitants. All of the road taxes and one-half of the other taxes must be paid to him by the first Monday in May, and the balance on or before the first Monday in November. Thus the first installment of the tax comes due fourteen months after the property was assessed. The collection of these taxes may be enforced by the sale of the real estate or of personal property.

On the first day of every month the County Treasurer is required, upon the authority of a warrant drawn by the Auditor, to pay into the State Treasury approximately all the funds belonging to the commonwealth that are in his possession. Complete settlements with the State Treasurer are required in June and December, but a sum, which is approximately equal to the school fund moneys that will be returned to the county, may be remitted in certificates of deposit. The proper amounts are paid over to the Township Trustees, to the Town and City Treasurers, and to School Trustees on the warrant of the Auditor. The rest of the funds are disbursed as ordered by the County Auditor or by the Controller of the county seat city or by the official entrusted with his work.

Depositories.

The State has a Board of Finance composed of the Governor, the Auditor of State, and the Treasurer of State; likewise, the counties, cities, towns, townships, and school corporations have their Boards of Finance. It is the duty of these Boards to choose the institutions in which the funds are to be deposited. The depositories must be institutions that submit to examinations by either the national or state bank officials, and they must each give a bond signed by seven freeholders for sixty per cent of the maximum public deposits, but they may offer instead bonds resting on the tax power within Indiana and deposited with the Auditor of State. They must pay interest of two per cent on daily balances and more on time deposits. These provisions are sufficient to make the public funds almost absolutely secure, altho there is occasionally a failure that involves some loss, usually small.

Supervision.

In addition to its duties in the equalization and adjustment of assessments, the State Tax Board is required to hear complaints. It is, moreover, commissioned to be on standardize partially the work of the county finance officials. It prescribes the blank forms used in making the valuations, it sees that all assessments are made according to law, it secures the collection of all taxes due the state, and it sends one of the appointed members to each county annually to hear complaints. It is, moreover, commissioned to be on the alert for possible improvements in the state tax system, and to make recommendations to the General Assembly. Another and equally important agency of oversight is the Department of Inspection and Supervision, at the head of which is the State Examiner, a skilled accountant appointed by the Governor. The Governor, the Examiner, and the Auditor of State comprise the State Board of Accounts. They prescribe a system of accounting uniform for every public office of the same class, and they devise methods of keeping separate the accounts of the different funds and of making reports. The Department of Inspection and Supervision sends out men who examine at least once a year the accounts of all public officers intrusted with the custody of money. These examinations, coupled with the requirement of reports, have been of great value in securing accuracy and efficiency in the mechanics of handling funds.

A Step Forward.

The General Assembly of 1913 adopted a law providing for a tax on inheritances and bequests. Ten thousand dollars is exempt to the widow; the first fifteen thousand dollars beyond that is taxed one per cent, and larger amounts at higher rates. Similarly, a person entirely unrelated to the decedent has to pay five per cent on the first twenty-five thousand dollars and increasing rates up to fifteen per cent on all above five hundred thousand. The rate is thus progressive—advancing with the size of the inheritance or bequest, and differentiated—augmenting as the degree of kinship lessens.

There are many ways of justifying the Inheritance Tax. Perhaps the best of them is the theory that all accumulation of wealth is a result of two factors among others, the ability of the man, and the opportunity for him to exercise

that ability. It is only fair that at some time society should receive some return for its contribution, the opportunity, and the Inheritance Tax is an easy way of securing this return. Another justification attacks the problem from an entirely different angle. For one who has not produced property to receive it without making compensation is not a right but a privilege. If the heir received nothing at all by inheritance he would receive not a whit less than he himself earned. Therefore, the appropriation of an estate by the commonwealth deprives no one of what he has deserved; on the other hand, this seizure lessens the necessary burdens of the struggling tax payers. There is no doubt but that the inheritance tax is in line with the needs of democracy.

Criticisms.

In spite of this recent forward step, the tax system of Indiana is intolerable. There is no virtue in multiplying illustrations, or in picking specific flaws. It is enough to reiterate that the General Property Tax has long been discredited on grounds of ethical justice, and is overwhelmingly a failure in Indiana from the standpoint of enforcement. The method of assessing corporations is approximately fair in theory for a state having the General Property Tax, but it would be more equitable if every corporation had to pay taxes to the state as to the Federal Government, on the basis of its net income. The General Assembly of 1915 created a special commission of five persons to investigate the problem of taxation in Indiana. These men have a great opportunity, but they are confronted with the fact that nothing short of a complete revolution will better the financial system of Indiana. As one of the Commissioners has expressed it, "No change could give us anything worse."

CHAPTER X.

The Constitution

The history of Indiana's Constitution inspires neither love nor admiration. The commonwealths of the union have had altogether approximately one hundred fifty new or thoroly revised constitutions, most of which exhibit a strong family resemblance. In this respect Indiana is pre-eminently commonplace. The original frame of government, constructed in 1816, was largely copied from similar instruments adopted in Kentucky in 1792 and in Ohio in 1803, with other bits taken from the United States Constitution, and an occasional original provision. It is small wonder that so much of this document was hastily thrown together by the convention at Corydon, for the harvest season was close at hand and the delegates were as eager to return home to work as they were to escape the miserable accommodations of the tiny capital. That the work could have been completed in a session lasting only from the tenth to the twenty-ninth of June was, it has been said, at least partially due to the fact that the Noble, Hendricks, and Jennings factions had agreed that Noble should be United States Senator, that Hendricks should go to Congress, and that Jennings should be the first Governor of the new state. They were in a hurry to divide the offices.

Before long the faults in the 1816 Constitution began to appear, but, altho several times a referendum was taken on the question of calling another convention, there was no general interest in revising the document. In 1849, however, every man coming to the polls to vote was asked to express himself orally as "for" or "against" the calling of the constitutional convention. By a vote of 81,500 to 57,418 the convention was decided upon. It met 7 October, 1850, the Democrat members outnumbering the Whigs nearly two to one. The result was that there was a general application of Jacksonian principles especially evident in the changes

from the appointive to the elective system of choosing many officials, and in the provisions for rotation in office by the limitation of terms. For example, the Governorship can be held by one individual but four years in any eight. In spite of Whig criticisms of the convention the new Constitution was adopted by the overwhelming majority of 113,230 to 27,638.

Difficulty of Amendment.

Altho it had taken one hundred twenty-six days for this convention to conclude its labors, dissatisfaction immediately appeared. Men wanted a return to the annual sessions of the Legislature, they desired to keep persons who were not citizens of the United States from voting, they chafed under a Supreme Court interpretation that prevented progressive sections from radically improving their common schools. Nevertheless, a proposal for another convention was defeated in 1859. After the Civil War, however, certain changes were necessary to avoid conflict with the Fourteenth and Fifteenth Amendments to the Federal Constitution. The first alteration was made in 1873. The Constitution provides that any amendment must be first approved by two successive Legislatures and then finally ratified by a majority of the electorate of the state. After several farcical ballots, seven amendments were voted upon at the April election in 1879. As the total number of votes cast at this election was 380,000, that figure represented the number of electors in the state and 190,001 was a majority. Altho every amendment was favored by a substantial majority of the persons expressing themselves upon it, the highest vote for any amendment was 181,000. The State Supreme Court, therefore, held that none of the amendments had been adopted. Moreover, none had been rejected, for there had not been a majority of electors against any of the proposed changes. So, because no action had been taken, the Court intimated that a special election might be called. This was done by the next General Assembly, and on March 14, 1881, the special referendum was taken. Not one proposition received more than 128,750 votes, yet each had a good majority of those who did vote. Each of these amendments has been allowed to be valid under the absurd but saving "legal fiction" that the number voting at a special election is the number of electors in the

state. Thus, by a striking violation of the whole intent of its amending article the Constitution was "legally" changed.

Amendment was again attempted when in 1900 the people were asked to vote on two changes, one enlarging the Supreme Court and the other allowing the Legislature to enact statutory requirements for admission to the bar. A substantial majority of almost two to one favored each change, but the higher affirmative vote, 314,610, for the enlargement of the Supreme Court, was less than half of the vote for Secretary of State, 655,000, and so neither was carried. Several subsequent votes were taken on the second—the Lawyers' Amendment. The last, in 1910, resulted in 60,357 for and 18,494 against the change. In 1911 the State Supreme Court declared that by virtue of the fact that it had been neither accepted nor rejected this amendment still stood "obstructive of further proposals for amendment" by reason of the constitutional provision that "while such an amendment or group of amendments which shall have been agreed upon by one General Assembly shall be awaiting the action of the succeeding General Assembly, or of the electors, no additional amendment or amendments shall be proposed." Now, to summarize the condition of Indiana,—it was universally recognized that certain alterations in the Constitution were imperative; one change had been put to the electors in 1900, but had failed to be ratified because an affirmative majority of all voters is required by the Constitution; yet no other amendment could be proposed because this change was still, after a dozen years, technically neither adopted nor rejected. There seemed to be three possible ways out of the difficulty; a special election might, under the old legal fiction, be held to dispose of these two proposals; a convention might be called by the Legislature; or a new expedient, credited to Governor Marshall, might be tried. As either of the first two methods would have been expensive and therefore unpopular, the Democrats in the 1911 General Assembly drew up what they called a new constitution. It was merely the constitution of 1851 with twenty-five sections more or less changed and four new ones added or substituted. These alterations were mostly in accord with progress, but they failed to reach some of the worst evils in the present system. The principal virtue of Marshall's constitution lay in the changes proposed in the method of amendment, changes that made further alteration

possible. This constitution was to have been submitted to the people for acceptance or rejection as a whole at the 1912 election. Thus it was hoped to evade all the restrictions of the present amendment article by invoking part of the bill of rights which proclaims that "the people have at all times an indefeasible right to alter and reform their government." Mr. John T. Dye, however, obtained an order restraining Secretary of State Ellingham and the state election commissioners from placing the question of the adoption of this new constitution before the people because the power to alter or to reform the government lay in these people. The reasoning may appear clearer if it is noted that the court held that this "new" constitution had been made by the Legislature. In drawing it up, the Legislature had usurped power to make a constitution. Governor Marshall's inspiration had served to delay still longer the possibility of revision.

The court must have felt a bit ashamed of this logic, at least it changed its mind and discovered that the Lawyers' Amendment really wasn't before the people after all; it had been rejected, and new amendments might be proposed. The General Assembly of 1913 passed favorably upon twenty-two amendments. These, however, were so carelessly drawn that by 1915 even their author proposed the dropping of some of them: others were approved by the 1915 Senate. These "Stotsenburg amendments," however, were killed without vote in the House, and again progress was foiled.

This may seem a long introduction to an exposition of the defects of the Constitution of Indiana, but it has been written to prove the first point, namely, that the article dealing with the process of amendment has been so constructed as to render necessary alterations almost or quite impossible. The people's "indefeasible right to alter or reform their government" has been destroyed by a technicality or by the scheming of politicians to postpone the day when genuine improvement will be demanded. Such a state of affairs is intolerable. Every fair minded person will readily grant that there are possibilities of almost unbearable tyranny in any conceivable system of majority rule. Yet probably not a thing can be said against majority rule that does not apply with redoubled force against minority rule; to let the few, fortified by a document composed by

men long dead, rule the many, is to allow the legitimate interests of the majority to be balked. Until the Constitution of Indiana can be amended with reasonable ease, many changes essential to public welfare cannot be realized. Not all of these imperative alterations now appear, for the needs of the country are still in the process of development. Therefore the first and severest criticism of the Constitution of Indiana is that it is too difficult to amend.

The Suffrage.

A second criticism of the Constitution may be levelled against the provisions that have to do with the franchise and its exercise. Very few are the men who would deny that the granting of the suffrage to persons who have merely declared their intention of becoming citizens of the United States, provided they have lived in this country a year and in the commonwealth six months, may be perfectly justifiable in certain individual cases; and yet, on the whole, little can be said in favor of allowing men to vote before they are accustomed to American institutions. On the other hand, it is practically certain that this alien element is one of the factors that has made possible the enormities of city government. So it seems that the demand that a citizenship requirement for the suffrage be written in the Constitution has a solid basis.

As the Constitution is too liberal in granting the franchise to aliens, so also is it too narrow in denying the ballot to women because of their sex. They have already proved their capacity for organization, and for originating, planning, and accomplishing worth while things. They have performed these feats without neglecting their usual home duties any more than such duties are ordinarily slighted by human women. Thru their clubs they have acquainted themselves with the best thot along social and political lines. They are ready now to exercise the franchise with discretion. The ballot, however, would bring new responsibilities, keener interests, wider wisdom; would give the women an opportunity to develop further, to serve further, to bring to the solution of social problems a less brutally materialistic attitude than that of men, and to make themselves more companionable to men. No great reforms are to be confidently predicted as an immediate result of the enfranchisement of women. What is to be expected is that the women

of Indiana, like those of other states, will vote as wisely as the men; that some of them, having more leisure than their husbands and a new incentive, will study public questions more deeply, and that thus a slightly greater degree of intelligence and a slightly less sordid philosophy will somewhat affect the ballot. In short, woman's suffrage has in it the possibilities of a slight improvement in the quality of the vote and of a large extension of woman's social utility thru an enlargement of her horizon.

If economic interests give a claim to the ballot, there were in 1910, 155,731 women ten years of age or over in Indiana who were employed for money, and about 576,524 who were employed in their own homes as managers. Some of these are well paid and others donate their services for less material return than they could earn on the open market, plus kicks or caresses depending on the disposition of themselves and their husbands. These housewives are business women: their business interests them directly in the fares and service of street and interurban railways, in the prices and management of gas and electric light plants, in the regulation of city markets, in the inspection of foods, in the disposal of garbage and other wastes, in the sanitation of the community, in the conduct of the schools, in the morals of the neighborhood and the efficiency of the police system, and in the taxes and expenditure of public funds. All these concerns are vitally bound up in the government. The typical business man wants to escape regulation, to be let gloriously alone or merely to be protected from the trusts; the typical business woman, the home manager, wants a government active in many lines. Rightly people have come to look upon government as a matter of business, rightly the business woman can claim as great an interest in government as the business man.

The valid arguments for woman's suffrage are few but compelling; the opposition resorts to an appeal to prejudice, to the self-interest of saloon keepers and corrupt politicians who probably will not be much endangered by women's votes, and to pointless shallow ridicule. There seems to be no reason for denying the ballot to women as women that does not apply with equal force to men.

If the suffrage is to be limited let it be limited to those who can read and write English, who can explain the constitution of the United States, who know the functions of

state and county and municipal officials, and who are in a general way acquainted with America's history. It is a shame for a state with free compulsory education not to require an intellectual test of its voters. This test need be no great burden, it might well be the attainment of a certain grade in school, the grade that ought normally to be reached by the age when attendance is no longer compulsory. A provision for the examination of immigrants and of persons who have improved their minds without the aid of the common school should be included. Such an educational test for the franchise would not accomplish wonders, yet it would remove from use some of the handiest tools of the machine politicians.

The prospects for woman's suffrage in Indiana are not particularly bright. In the 1915 General Assembly the Senate by a large majority passed a bill to give the ballot to the women in electing all officers not mentioned in the Constitution, but the speaker of the House of Representatives referred the measure to Judiciary Committee A, whose chairman, Representative Sare of Bloomington, saw to it that the bill never came to a vote. It is possible that such conduct, which, altho typical of legislative bodies, is despicable in dealing with an important issue, has made a large number of friends for the equal suffrage movement, but a popular vote at this time would probably be against any change in the direction of extending the franchise. There is no doubt, however, but that the extension will come eventually. The recent suffrage victories in Illinois, Montana, and Nevada, combined with the fact that in the 1915 elections over a million men in Massachusetts, New York, New Jersey, and Pennsylvania, expressed a desire that the women might share the responsibility of state, have awakened folks everywhere to the vitality of the issue. The women of Indiana are organized in a Franchise League, the club women are eager for the ballot, the teachers are almost unanimously fervent suffragists. The character of those who espouse the cause of women, combined with the essential justice of their purpose, cannot long fail to secure the equal franchise.

Efficiency of the Ballot.

So much may be said of needed changes in the personnel of the electorate. Other alterations are needed to pro-

tect the efficiency of the ballot. In the first place, the Constitution should be so amended as clearly to sanction the registration of voters. The value of registration is twofold: first, it protects the legitimate voter from interference in his exercise of the franchise; and, second, it prevents colonization, or the taking of voters from one city to another. Of course, registration has, upon occasion, proved a farce, yet, in most cases it is of some value.

In the second place, the Constitution should be rid of the present absurd provisions to secure rotation in office.

At present a man may hold the office of Governor but four years in any any eight;

A man may hold the office of Secretary of State but four years in any six;

A man may hold the office of Auditor of State but four years in any six;

A man may hold the office of Treasurer of State but four years in any six;

A man may hold the office of Clerk of Circuit Court but eight years in any twelve;

A man may hold the office of County Auditor but eight years in any twelve.

A man may hold the office of County Recorder but eight years in any twelve;

A man may hold the office of County Treasurer but four years in any six;

A man may hold the office of Sheriff but four years in any six.

The argument that a man holding an office will devote himself exclusively to its duties if he is ineligible to succeed himself because he will be rid of the temptation to secure his own re-election, would be of weight were there no other posts to stimulate his ambition. As a matter of fact one office is frequently used as a stepping-stone to another. It may, moreover, seem good to limit a man's tenure in order that irregularities can be disclosed. However, disclosures are rare if the successor is of the same party, and they are discounted if the successor is of the opposite party from the former incumbent. The good accomplished by these constitutional provisions for rotation is negligible. Their cost is great in that a good official, one who thoroly knows his business, must quickly be replaced by another—generally a

man untrained to the task. The rule, therefore, encourages inefficiency.

In the third place, altho it is possibly more democratic that all officers be elected than that some be appointed, the voter should be protected from an overburdened ballot. Certain it is that many men are now elected because their names are placed on a particular ticket rather than because their merits are recognized. In presidential years Indiana citizens will usually vote at one election for Presidential Electors, Congressmen, Senators, Governor, Lieutenant Governor, Secretary of State, Auditor of State, Treasurer of State, Justice of the Supreme Court, Clerk of the Supreme Court, State Superintendent of Public Instruction, State Representative, State Senator, and many other less important officials. As a result the voter is so bewildered by a list of names that he cannot possibly choose intelligently in every case. Moreover, many state officials are independent of the Governor. Finally, state and national and local issues are mixed. The remedy is in the short ballot. If the voters could select the Governor, Lieutenant Governor, and legislators, and if the Governor could appoint his own cabinet, executive responsibility could be made real, because the Governor would be the actual head of the whole administration. There is nothing undemocratic in thus increasing the efficiency of state government by creating unity in administration.

Legislative Restriction.

A third class of defects in Indiana's constitution is the group connected with legislation. Two sections are so obsolete that there is no valid reason for their retention. The requirement that revenue bills shall originate in the House of Representatives is probably harmless, but it has no justification now when every bill must pass both houses and when such measures are radically amended in the Senate. It is a copy in form of a principle very important in the English Constitution that the purse ought to be controlled by the branch of the legislature elected by the people. The reason is non-existent when the people choose the entire legislature. The second of these obsolete provisions requires that every bill be read three times in each house and that the third reading be by sections. Anyone who has witnessed the farce of these readings will agree that a much

wiser provision would call for the distribution among the senators and representatives of printed copies of each bill and of all proposed amendments.

But these criticisms are unimportant compared with others. Either the Constitution should provide for the division of the State into approximately equal districts, each to elect a senator, and into other districts, each to elect a representative, in which case the smaller counties would not lose their votes: or, what would be still better, it might institute a system similar to that of Illinois. The State might be divided into fewer districts, each to elect three senators, and no political party would be allowed to nominate more than two candidates in each district; in this way both majority and minority in every section of the commonwealth would of necessity be represented. The same results could be accomplished in the House of Representatives. Or, Illinois might be imitated more closely. In that case, three senators would be chosen from each district, and each voter would be given three votes to be cast as he chose, all for one man or distributed among the candidates in any manner. By this means the minority, if united, could be assured a representative in each house from each district.

Another absurd provision in the Constitution, the limitation of the regular session of the General Assembly to sixty-one days, grows out of the fear that legislators will stay on indefinitely expending the resources of the State. The result is excessive haste at the end of each session. The logical course would be to pay the members annual salaries and allow them to meet as long as they desire. Perhaps it would be well to facilitate some deliberation by placing a minimum limit of say fifty days to the regular session; then the members could not shirk the form of doing service equivalent to their remuneration. The French require this minimum session of their Diet. Moreover, the veto power of the Governor should be modified so that he could refuse his consent to one or more sections of a bill without disapproving the whole. This would enable him to prevent certain appropriations without stopping the entire machinery of the State; it would also allow a strong Governor to bring squarely to an issue in the General Assembly any one provision of a measure which may have "ridden thru" because a majority opposed to that provision could not defeat it without defeating the bill good in the main. No tyranny

could result from such power, as a majority of each house can over-rule the Governor's veto.

One of the greatest weaknesses among the provisions of the Indiana Constitution is its failure to give the people any way of forcing their will upon a machine-controlled Legislature. The remedy for this failure is the Initiative and Referendum. There are many variations of both the Initiative and Referendum. The essential feature of the Referendum is that after the Legislature has passed a law, a given per cent of the voters may within a limited time petition that the measure be referred to the electors. This petition suspends the operation of the bill until the popular vote has been taken. The Initiative enables a given per cent of the voters to require by petition the submission of a certain bill to the people, in case the bill has been before the Legislature and failed to pass, or even if it has never been considered by that body. In either the Initiative or the Referendum, an effective method involves the printing of the proposed bills in a pamphlet which contains brief but forceful arguments on both sides of each question; and final decision as to the enactment of the bill into a law must be by the popular vote. In many states so-called direct legislation provisions in the constitutions have been valueless because of the absurd "safeguards" inserted by the old line politicians. To be effective the law should require the signatures of not more than five per cent of the voters to cause a bill that has been passed by the Legislature to be referred to the people, and not more than ten per cent to compel a popular vote on a bill that the General Assembly has not passed, whether that body had ever considered the subject or not. Moreover, a majority of the votes cast on the measure should be sufficient to secure its enactment or rejection.

The argument for direct legislation is simple and cogent. Thru the caucus system the majority of the majority party in each house of the General Assembly controls the vote of that house. Again, the House may refer bills to committees which no power in the Legislature can compel to report. Here, too, the minority may rule by blocking. So a great deal of the legislation is passed or defeated according to the will of a minority; the defeat of some candidate for re-election cannot check this evil—the only eradicator is direct government. If the people have a means of speaking directly whenever they see fit, the caucus cannot

forever block their will. A constitutional right of direct legislation should do away with the need for the actual use of the Initiative and Referendum. If what the General Assembly does the people may promptly undo, if what it omits the people may within a year perform, the value of a legislature to the interests which now control it will be much diminished; it will be nearly useless to buy up a General Assembly whose action is not final. Moreover, a legislature is likely to be more responsive to the will of the electors if they can promptly enforce that will. Thus direct legislation, most successful where it is least used, is a necessary and potentially effective safeguard for the "sacredness of the franchise."

Of course there are objections to direct legislation. It is expensive to print bills for public distribution and to provide ballots. The number of measures offered the voters of Oregon at an election is overwhelming, and the people have failed to pass some laws that would have been good, while they have enacted others that were conflicting or poorly drawn. All these objections are valid but weak, for the cost is slight compared with the possibilities of gain thru better laws, and the public can as well consider fifty measures in a couple of months preceding an election as the legislature can dispose of five hundred in a limited period of high pressure. If the people in the commonwealths having direct legislation have failed to be as righteous as reformers have desired them to be, they have certainly proven themselves more discriminating than many legislatures; if the people pass ill-drawn measures so do legislatures many, many times.

Especially in Indiana, so long and so notoriously a victim of unrepresentative General Assemblies, is direct legislation a pressing need.

Justice.

The fourth point wherein Indiana's constitution fails is its group of provisions concerning justice. In the first place, the Supreme Court, constitutionally limited to five members, is overworked; it is, therefore, necessary to provide more justices, a thing which is possible only thru amendment. In the second place, the Constitution provides that every voter "of good moral character" shall be entitled to practice law in all courts of justice." The absurdity

of this privilege at the present day is so apparent that the lawyers have been trying for years to set up some standards for admission to the bar. The story of the failure of the necessary constitutional amendment has already been told. The third constitutional principle that is an impediment to the realization of justice is that part of the bill of rights which orders that "no person shall be put in jeopardy twice for the same offense." The absurdity of this clause is illustrated by a recent happening in a New York City court. Two men accused of committing the same crime were tried separately. The first was acquitted. He then was called as a witness at the trial of the second, and he testified that he had committed the crime himself, unaided. Therefore the second man had to be acquitted and there was no way of punishing the first because he could not twice be put in jeopardy for the same offense. What the constitution should recognize is a verdict of "not proven." Thus, if new evidence came to light, it would be possible to try a suspected criminal a second time. Finally, it is the command of the Constitution that "In all criminal cases whatever, the jury shall have the right to determine the law and the facts." It is hard to imagine the possibility of bringing together a group of twelve laymen capable of agreeing upon the law in cases that are at all complicated. If only law were taught in the schools perhaps that would make the constitutional provision less foolish. It might be added that a three-fourths vote of a jury should be sufficient to convict. It is so nearly impossible to convict in criminal cases that, even at the risk of occasional injustice to an individual, it is desirable to make a verdict of guilty more easily obtainable.

Financial Provisions.

In a fifth group of defects in the Constitution of Indiana are two of its financial provisions. One allows no debt to be contracted by the commonwealth, except to supply a casual deficit; to pay interest on the public debt; or to repel invasion, suppress insurrection, or to provide for the public defense if hostilities are threatened. Surely it is desirable to keep a state out of debt, but just as certainly there are times when a debt is a very useful expedient for distributing over a number of years, the fewer the better, a large payment. The other section requires that "The General

Assembly shall provide by law for a uniform and equal rate of assessment and taxation." The evils resulting from this clause have been set forth in the chapter on Finances and need not be reiterated here.

Narrow Interpretation.

The sixth group of constitutional defects arises out of a narrow interpretation of its terms. Because by that document local or special laws are prohibited in a large number of expressly enumerated cases and "in all other cases where a general law can be made applicable," it is maintained that home rule for cities is unconstitutional. A fair and practical interpretation would hold that a general act could enable cities to frame their own charters, subject to approval or rejection by the Legislature. Such a law would be properly a general act. The spirit of the Constitution would still be fulfilled if certain uniform fundamentals were set forth to be included in every charter. The need of so-called home rule for cities lies in the fact that each municipality has its own peculiar governmental problems which are ignored by the present general laws. Each city should be allowed to advance to the commission or to the city manager plan of government as soon as its inhabitants feel the desire for a change to something better than the old system. Another narrow interpretation has, according to the chairman of Judiciary Committee A of the 1915 Legislature, T. J. Sare, interfered with the fullest development of the workmen's compensation law. The Constitution should be changed to allow both home rule for cities and a free hand to the Legislature regarding workmen's compensation.

Miscellaneous.

Finally, there are some provisions in the Constitution harmless but of no use. For example, the charter of a bank might better be indeterminate than limited to twenty years, and the census of voters might much better be taken every ten years midway between the United States Censuses than every six years, which will bring the next count in 1920, the same year as the Federal enumeration.

Summary.

There are so many holes in the structure that nothing short of a thoro overhauling or an entirely new Constitution will meet the needs of Indiana. Why is it, then, that, notwithstanding the fact that all the political parties, the State Federation of Labor, the Women's Clubs, and many other organizations have expressed themselves as desirous of a constitutional convention, none has been called? In the first place, the politicians are a bit timid about appropriating the money necessary to provide for a convention. Just why they hesitate it is hard to say, unless the cost, approximately \$1,000,000 would be known definitely and criticised widely. It is safe to predict that reforms in the financial system would easily make up the burden of the convention in a year or two. So the 1913 General Assembly evaded the issue by providing for a referendum vote on the question of a convention, and then proceeded to obscure the issue by initiating the so-called Stotsenburg Amendments. In the second place, the strong liquor interests are inexpressibly hostile to the convention which they fear will bring direct legislation, state prohibition, and woman suffrage, eventually if not immediately. In the third place, public utilities strongly desire a retention of the present form of city government. They fear that under a new Constitution the municipalities might be tempted to take over some of their own utilities and thus remove the sources of great profit from private control. Fourth, machine politicians must oppose a new Constitution, for changes that are probable would make their positions less secure and would injure their patrons and backers, the saloons and public utilities. Fifth, there is a group of people, honestly conservative, who believe that anything that is, is superior to what might be. The present Constitution has been interpreted by the courts—a new one would make necessary a repetition of all this labor, would make many established legal points again uncertain. There is some truth in this contention, and it is probable that years would be necessary before the courts could settle definitely every point, but no constitution that the conservative people of Indiana would adopt would make any startling changes in the law. Sixth, the great mass of people simply have lacked the breadth of information necessary to enable them to appreciate the defects of the present

frame of government, and therefore they did not take trouble to vote at the 1914 election on the question of calling a convention, or else they voted against the convention because they were not sure it was imperative. Seventh, the issue of a new convention at the last election was confused by the fact that the widely heralded Stotsenburg Amendments were pending in the Legislature, and it was predicted that they would pass and obviate the necessity for a convention.

The question simmers down to this: it is highly important to some monied and political interests to retain the present constitution. Altho it would be to the financial betterment of the State to have a more efficient government under a modern constitution, no individuals see enough personal gain to care to exert themselves for the convention. Incidentally a constitutional convention would be of immense educational value to the state, for it would bring before the public for practical discussion the problems of government in simplified form because they would be somewhat separated from party questions. There are now at work forces that will doubtless eventually win for Indiana the constitution she must have if she is to occupy a leading position in the nation.

CHAPTER XI

Charities and Correction

I. Poor Relief.

The provision for the physical needs of those adults who are unable to provide for themselves falls into two somewhat distinct types: indoor relief, or that given in institutions provided for the purpose, and outdoor relief, or assistance rendered in the home of the individual or family. In poor relief, as in all phases of charitable work, it is important to distinguish between the so-called public and private agencies. By a public agency is meant any agency supported by taxation, and generally managed by public officials. Private or voluntary agencies are any supported by private contribution and voluntary benevolences, whether individuals, associations, or churches. Whenever used in this chapter the terms outdoor, indoor, public, private or voluntary will conform with these meanings.

As early as 1790 Indiana recognized public responsibility for the poor in the act creating the territory's divisions. By 1831, there were five distinct ways by which the public authorities cared for the poor. Rawles describes these as follows:

ments in plant or administration, and passes on all plans for

"The poor asylum system, which meant the gathering of the poor in asylums or farms under the superintendence of county officials; the contract system, which signified a similar congregation under the control of a private person paid by the county; the farming out system, under which the poor, individually, were placed in the care of private persons who received a compensation; the apprentice system for minors; and the outdoor relief, under which aid was furnished by the township trustee or county commissioners to persons not cared for in any of the ways mentioned above."

(1)*

*The numbers in the parenthesis refer to references under topic XI in the Selected References in the Appendix.

Altho the progress for a half century after 1831 was very slow, Indiana has long since abolished all but the first and last of these methods. The development of specialized institutions for particular groups has made the poor asylum less a general dumping ground for all the wrecks and failures and unfortunates than it once was. Thus the insane, the feeble minded, the epileptic have been removed to a considerable degree, altho a few insane, many feeble minded, and some epileptics still remain. The law has forbidden the keeping of a child over three years for more than sixty days in a poor asylum. The tendency, therefore, is for this institution to become a home for the infirm and aged.

Every county in the State maintains a poor asylum. The superintendent is elected by the Board of County Commissioners for a term of four years, and paid an annual salary. The Board of State Charities inspects each asylum, reports on its condition, recommends any necessary improvements in plant or administration, and passes on all plans for new buildings. The following from the 1914 Report of the Board of State Charities is significant:

"The asylum buildings are of all kinds of architecture and material. Some are good modern structures; others are old, ill-arranged buildings and some are unfit for habitation. Several of those now in use were erected before the requirement was made by law for the plans and specifications of all asylum buildings to be submitted to the Board of State Charities for its criticism before their adoption by the county commissioners.

"It is gratifying to note that some of the superintendents and matrons make special effort to provide suitable employment for the inmates.

"There is a lack of hospital facilities for the care of the sick and invalids in most of the poor asylums. The asylums in Lake and St. Joseph Counties have well equipped hospital departments and a few other asylums have quarters where the sick may be comfortably cared for. However, the greater number make no provision for this class. The sick and helpless inmates in many asylums are compelled to occupy rooms with disagreeable persons, their only attendant being an insane or feeble-minded inmate. In an asylum visited recently two helpless men occupied a small room with an insane man who cares for them. The room was cold, dirty and signs of neglect were in evidence. In an-

other asylum a woman was found moaning with pain caused by cancer. Her attendant was a blind daughter.

"* * * Many of the physicians manifest interest in the care of the inmates and do all in their power to relieve the suffering; others make the visits reluctantly and give as little service as possible.

"Most of the asylums attempt to keep the sexes separated, but in several the segregation is incomplete. In some asylums the lack of proper separation is due to the poor arrangement of the buildings; in others it seems that the management does not realize the importance of this matter. Recently a woman gave birth to an illegitimate child in one of the asylums and it is reported that an inmate of the same institution is the father of the child. In another asylum it was found that a feeble-minded woman was allowed to stay in the basement where the male inmates spend much of their time.

"In each asylum is a proportionate number of mental defectives. For many of these no other provision need or could well be made, but from time to time young feeble-minded women are found who need the protection and training which it is impossible for them to have in the poor asylum.

"A few of the asylums have special buildings and attendants for the insane, but the majority are not prepared to care for this class of unfortunates. * * * Some of the asylums have good separate buildings for the insane; many have poor, unsanitary quarters and several make no special provision. While a few of this class have special attendants the majority are cared for by other inmates. In one asylum three insane women who were locked up were being cared for by a male inmate who carried a key to their cells. In another asylum the inspector found a young epileptic woman and an old insane woman both locked in a small room on the second floor, where they were kept all the time. The sanitary conditions were bad. The young woman had frequent attacks of epilepsy and the only care she received was given by the insane woman, who at times was violent. Insane persons are often found locked up in the asylums when it would be unnecessary if they could have proper care. In some asylums those in charge do the best they can; others seem at a loss to know what to do. None of the asylums has the facilities for giving the insane care and treatment by those having training and skill for such work.

It is pleasing to note that provision is made in some

asylums for occasional entertainments and amusements of various kinds. In several counties these occasions have been made possible by the board of county charities. It is believed that the poor conditions existing in many of the poor asylums are due to a lack of interest on the part of the public.

"Some of the superintendents made special effort to have the citizens of their county visit their institutions and acquaint themselves with the conditions and needs. This plan is to be commended. Under the law the county commissioners must visit the asylum at least every three months. It is noted that in some counties the commissioners do not do their duty in this respect.

"While many unsatisfactory and some deplorable conditions still exist in poor asylums, on the whole the tendency is toward a higher standard of management.

"There were 2,197 men and boys and 1,031 women and girls in the ninety-two county poor asylums and the Marion County Asylum for the Insane on August 31, 1914, a total of 3,228. The following tabulated statement classifies this total by sex and age:"

AGE	Males	Females	Total
Under three years.....	7	6	13
3 and under 17.....	14	12	26
17 and under 30.....	91	63	154
30 and under 45.....	248	165	413
45 and under 60.....	578	259	837
60 and under 75.....	865	301	1,166
75 and over.....	394	225	619
Total.....	2,197	1,031	3,228

One great cause of many of the undesirable conditions in poor asylums is the fact that the institution does not come before the eyes of the community. The public generally rests content in the belief that a place has been provided for the poor, and they are therefore beyond the need for attention. An attempt to remedy this situation has been made in Indiana. A state law provides for the appointment by the Circuit Judge of a board of public spirited citizens in each county who shall serve without salary and constitute a County Board of Charities. Their function is to visit the poor asylum, jail, orphans' home, and any other county institution and keep its condition and needs before the community. They thus mediate between the institu-

tion and the public sentiment of the county. At the close of the year 1914 there were sixty-nine counties having such boards.

Another factor in the situation is the low salaries paid poor asylum superintendents. Since the administration depends so much on the efficiency of the superintendent, extremely low salaries mean incompetent management. In the last few years there is evident a decided tendency toward an increase of the amount paid. This with the four-year tenure will make for higher efficiency.

The public outdoor relief of Indiana marks a considerable advance over that of most other states. Thru a series of laws the principle of state supervision of outdoor relief has been established. This has resulted in reducing over half the amount spent for this purpose. A more important item in the improvement is the reduction of the number of individuals and families unwisely helped and thus pauperized. In 1897 one in every thirty-one of the population were recipients, in 1907, one in seventy-one. Moreover, the system of reports required has lifted the matter out of the field of petty graft and made the local community financially responsible for the expenditure for its own poor.

The main provisions of the law are as follows: the township trustee is overseer of the poor, and the sole dispenser of outdoor relief. Each year a tax is levied on township property to cover the amount spent the preceding year. The trustee must investigate the circumstances of every applicant for relief. Reports of these facts and amounts expended are made in triplicate, one copy being retained by the trustee, one copy going to the county auditor, one to the Board of State Charities. Whenever the amount given to any individual or family, other than medical relief, burial, or assistance to a child in attending school, reaches fifteen dollars for any one quarter no more may be given, except by permission of the County Commissioners. Cases of permanent need are to be sent to the poor asylum, except under special circumstances where permission can be secured from the commisisoners for further outdoor relief. The trustee is directed to coöperate with private agencies to prevent duplication and to further efficiency.

There is no doubt that this poor relief law, marking as it does the most advanced position in the nation on public

outdoor relief has been of inestimable benefit to both the tax payers and the poor themselves. Its benefits, however, have been chiefly in the direction of eliminating dishonesty, reducing unnecessary expenditures, and reducing the process of pauperization by unwise public support. Important as these improvements are, they do not constitute the last word in outdoor relief. There is manifest a growing demand for higher efficiency in the public care for the poor. One group of needy individuals in particular has come to the front in Indiana in the last few years as in other states, namely, mothers with children dependent solely on them for support. It is maintained that such families do not receive adequate assistance from the community and further that such families are often broken up because the mother is unable to support the children.

In the last two sessions of the Legislature bills have been introduced for the establishing of so-called mothers' pensions by the State, which is merely one form of public outdoor relief, and not a pension system at all. There has gathered around these bills a considerable degree of popular support, tho not sufficient to carry them thru the Legislature. The public interest in the bills, however, cannot be disregarded, and an explanation for it must be sought. Most of the people engaged in social work and many public officials have been opposed to the bills. Their opposition has been explained by the friends of the bills on the grounds of a narrow selfish interest in maintaining a status quo in public and private relief work. The real explanation of the opposition, however, is to be found in the belief on the part of the opposition that our present system of public outdoor relief is adequate, or at least that the proposed measure would not improve it.

It is highly important that the opponents of mothers' pension legislation should recognize a very great need for improvement in the administration of public outdoor relief. It is in this direction that the explanation of the popular support of the proposed legislation is to be found. On the other hand, it is important that the real position of the opponents of the new plan be understood. They maintain correctly that mothers with children to support constitute but one group, and a small one, of the entire number that are in need of public outdoor relief. To create a special machinery to deal with one small part of a large problem is

manifestly contrary to wise public policy, with reference to both economy and efficiency. Again, it is correctly pointed out that much of the very great improvement that has been attained in the administration of public poor relief in Indiana has come thru reducing the number of agencies that dispense relief to one, namely, the township trustee. A multiplicity of agencies means either inevitable duplication, or expensive administrative machinery for preventing it. All mothers' pension measures, so far proposed, have called for a new agency for dispensing relief.

Still further, it is maintained that the public officials who would dispense mothers' pensions could be no more efficient in learning the actual needs of the applicants for relief than are the trustees. We already have the administrative machinery necessary for doing all the new plan calls for and doing it as well.

A solution of the problem presented by needy mothers without male support, can manifestly be met only by relating it to the general problem of public outdoor relief. And evidence is not lacking that there are many other phases of this general problem that call for attention quite as urgently as that of the mothers, if not more so.

The central difficulty in the whole matter lies in the inefficiency of the township trustee. The administration of relief is now recognized to be a task calling for a high degree of personal adaptation and of technical training. Without these qualities in the administrator public poor relief is at once inadequate for some of the poor and pauperizing for others. The salary attached to the office is not sufficient to attract the most capable and, moreover, the duties of the trustee are so various that it could not be expected that a person trained in administering relief would be qualified for the other duties. The solution seems to be in the direction of employing experts trained in the field of poor relief to act as assistants of township trustees. These assistants, while under the control of the public official could bring to the task of administering the poor relief those methods that have become recognized as efficient in this field. Such a provision, with very slight additions to the present law, would not only meet all the needs lying back of the mothers' pension agitation and escape the dangers of a separate handling of that group, but would also

raise to the level of scientific efficiency the whole field of public outdoor relief.

In townships of large population, of which there are a considerable number in the State, there is sufficient work for the entire time of such an expert. In less densely populated districts one such worker could be employed for the whole county. The salary in any case would be less than the amount now paid in per diem allowances to the trustee for his work.

The following statement from the annual report of the Board of State Charities shows the extent of outdoor relief work:

"Statistics compiled from the reports of township trustees for the calendar year 1913 indicate a total of 50,403 persons aided from public funds and relief amounting to \$302,377.55—decreases compared with the year 1912 of 678 in the number of recipients of aid and of \$3,315.16 in relief given.

"There were 17,940 different cases considered, including 11,134 families and 6,806 persons not members of families. There were 43,597 persons in the 11,134 families helped, an average of 3.9 persons to each family. The family members and the single individuals given make the total number aided during the year, 50,403. Classified by sex, age, color and nationality, they make the following showing:

Sex—

	Number	Per cent
Males	24,355	48
Females	26,048	52

Age—

Under 17 years	24,465	48
From 17 to 60.....	20,519	41
Over 60	5,124	10
Unknown	295	1

Color—

White	47,296	94
Colored	3,106	6

Nativity—

American	46,026	92
Irish	459	1
German	1,268	2
Unclassified	2,650	5

"It appears from the trustees' reports that sickness is the most frequent cause for asking help. Of the reasons as-

signed for giving help in a total of 17,092 cases, sickness or burial was given 9,878 times. In addition to this, much medical relief is paid by contract and many trustees fail to report in the regular way the persons so aided. Transportation was given 1,978 times. Other reasons for giving help were: lack of employment, 973 times; old age, 1639; widowhood or non-support, 1,822; insanity and idiocy, 171; other physical defects (blind, deaf or crippled), 752."³

In the development of private or voluntary poor relief Indiana presents a situation very similar to that of the Middle West in general. There are twenty homes for the aged, besides four similar institutions maintained by fraternal orders or churches for their own members. For most of these an initial fee or a small monthly payment must be charged. The demand for this institutional care for the aged is very much beyond the facilities offered. It is doubtful whether it can be expected that private benevolence will ever provide much more generously for this group. The need will doubtless have to be met by making the county poor asylums sufficiently comfortable so that so many homeless aged and infirm will not be repelled from going there. Undoubtedly the great demand at present for private homes for the aged is due to the unsatisfactory conditions prevailing in the county poor asylums. Persons of cleanly habits and accustomed to freedom from contact with disreputable and repelling personalities have a deep horror of residence in the average county home. While the public cannot be expected to provide luxuries, it is not too much to expect of a prosperous State such as Indiana is that the home provided for the homeless aged and infirm should not be surrounded with such undesirable conditions that many of those most needing care should with extreme difficulty be persuaded to go there. Until some material improvement in the county homes is brought about there will continue to be a heavy demand for more private homes for the aged.

There is one group of the poor and infirm for which the State has provided most generously in institutional relief, namely, "honorably discharged soldiers, sailors and marines and their wives and widows. While men who have served the United States in any of its wars can be received, preference may be given to members of Indiana military organizations. The wives and widows of such men can not be received unless they are over forty-five years of age and the

contract of marriage was entered into more than two years prior to the passage of the act of 1911. Only such as are without means of support and who are and for five years immediately preceding application have been residents of the State are eligible to admission. Honorably discharged, destitute army nurses who were citizens of Indiana when employed and have been such for one year immediately preceding application may also be received. * * * * *

"The Home is supported by the State at the rate of \$16 per month for each member, officer and employee thereof.*** The State is reimbursed by the United States to the extent of \$100 per year for each soldier. Under certain circumstances the board of trustees has authority to require pensioned members to turn over to the State all their pension in excess of a specified amount, and this can be used toward defraying the expense of maintaining the Home. For the year ending September 30, 1914, the State per capita allowance amounted to \$188,874.51, the National Government reimbursed the State to the extent of \$32,900.00 and the excess pension fund amounted to \$10,926.73."⁴

The number of inmates present at the last report was 961.

The development of private or voluntary agencies for poor relief in the State is confined almost entirely to the larger cities. In the smaller towns and villages the churches are the principal agencies besides philanthropically inclined individuals. But the relief work of both churches and individuals wherever unorganized and unsystematized is of very doubtful value. It lacks in discrimination, adequacy, and constructive effect. Many persons are helped who should not be, the help given is seldom sufficient to meet the needs of those aided, and practically no results are secured in putting the recipient back on his feet for self support. This haphazard, impulsive, and undirected charity cannot therefore be regarded of much real value, altho it generally springs from the best of motives.

The only safeguard against this sort of private charity is systematized effort along the lines of the charity organization society movement. There were in Indiana in 1915 twenty-two societies that employed secretaries and thirty-seven other towns or cities with some attempt at organized charitable work. There are in the state eighty-eight towns and cities of twenty-five hundred population and over, thus leaving over one-third of those in which there is no organiz-

ed effort for family relief and there are nine cities of ten thousand and over who have no employed secretaries. It would seem that there are, therefore, many communities in Indiana where the conception of adequate family relief consists in Thanksgiving and Christmas baskets and an occasional doling out of a ton of coal.

II. Children.

The assumption of parental functions by the State toward the child is very old in Indiana. In the territorial laws of 1795 provision was made for the township overseers of the poor to bind out as apprentices orphan children and those whose parents were too poor to support them. Since that day the development in both the amount and character of the care given to children deprived of their natural support has been great.

At present three distinct groups of children may become public wards: the dependent, the neglected, and the delinquent. A dependent is defined by the statute as any boy under sixteen years of age or girl under seventeen, who is dependent upon the public for support or who is destitute, homeless or abandoned. By "neglected" is meant any boy under sixteen or girl under seventeen "who has not proper parental care or guardianship; or who habitually begs or receives alms; or who is found living in any house of ill-fame, or with any vicious or disreputable persons; or who, is employed in any saloon; or whose home by reason of neglect, cruelty or depravity on the part of its parent or parents, guardian or other person in whose care it may be, is an unfit place for such child, or whose environment is such as to warrant the state, in the interest of the child, in assuming its guardianship."⁵

A delinquent child is any boy under sixteen or girl under eighteen who has broken a statute or ordinance, or become truant or incorrigible.

In treatment the dependent and neglected are generally considered together and the delinquents as a separate group. In fact, however, the delinquent child is really a neglected child and if so treated would generally escape the career and stigma of a delinquent.

The history of the public provision for dependent and neglected children in Indiana presents a very adequate picture of the evolution of children's charities in the United

States for the last half century. Step by step there can be traced here the growing appreciation of the importance to the state of its child wards, and the intelligent understanding of the methods necessary for safeguarding their welfare.

Since 1897 no child between three and seventeen years of age may be kept in a poor asylum for a period longer than sixty days. Commissioners of each county are empowered to erect and maintain homes for dependent and neglected children or to coöperate with other counties in doing so. Or the commissioners may pay to voluntary societies or homes a per diem for each child cared for as a public ward. There are at present twenty-four counties which maintain homes and nine privately managed homes receiving public wards. Of recent years, however, the tendency in Indiana has followed that in the nation at large, namely, toward placing children in foster homes instead of providing institutional care for them. It has been discovered that even an excellently managed institution is not comparable with a private home in which the child will receive personal attention and opportunity for the development of initiative and self-dependence. The orphans' homes, therefore, are more and more making efforts to use the institution for merely temporary quarters for those children who are placeable in homes. Many children, however, cannot be placed and for these institutions will have to be maintained unless a boarding out system be adopted as in Massachusetts. In Indiana this method has never been undertaken as a general policy.

Since 1901 Indiana has made use for all parts of the state of a system of county Boards of Children's Guardians. This is a non-paid board of six parents, three of whom are women, appointed by the circuit court to serve as guardians for the dependent and neglected children of the county. They may petition for the custody of any such child under fifteen years of age and if the facts warrant it the child may be made its ward by the court. The Board then has the power under the court of placing such a child in any institution at the expense of the county or of securing for it a foster home. This system of enlisting in each county a group of public spirited persons who will give thoughtful consideration to dependent and neglected children, in conjunction with the court, marks a distinct step in the evolution of the public care of children.

An additional measure of protection is provided in the Board of State Charities. To this Board is given the supervision of all work for children who are maintained at public expense. All orphans' homes are required to furnish the Board with a list of their public wards. The agents of the Board visit these homes, secure foster homes for individual children, and continue supervision of the child after it is placed in a foster home until it is adopted or until it reaches twenty-one years of age. The following excerpts from the report of the children's department of the State Board indicate somewhat the scope of its activities:⁶

"While all phases of the work of the department have received careful attention, much effort has been devoted to the visiting of children in family homes. The law requires that each child placed in a home shall be visited at least once a year and as much oftener as the welfare of the child makes it necessary. This year every child has been regularly visited and many of the older boys and girls received two regular visits. Some have been visited even more frequently.

"The population in children's institutions is increasing slightly from year to year. There are a large number of small children, especially boys between the ages of six and ten years. Little difficulty is experienced in placing the babies or the older boys and girls. Four institutions have a population of about 200 each. * * * * * These institutions are caring for the dependent children of most counties which have no orphans' homes. The closing of the local children's institutions has increased the population of these four. The other 29 orphans' homes caring for public wards have a population ranging from 10 to 108 children."

"In addition to visiting children in family homes, and in a general way supervising the work of the orphans' home associations, the agency has found time, in the seventeen and one-half years of its existence, to place 3,216 children, and it is gratifying to know that 2,449, or 76.1 per cent of them have remained off public support. Finding homes for these 3,216 children involved 5,398 placements and transfers. * * * At the beginning of the year there were 1,623 public wards in the different orphans' homes in the State. In the twelve months just closed 986 children not previously on public support have been received, and 371 former wards have been readmitted, making a total of 2,980 children handled during the year."

The Board was also empowered in 1909 to assume over-

sight of all persons and agencies caring for and finding homes for dependent children. This oversight consists in inspection and the granting of licenses to those whose equipment and work meet the approval of the Board. The power thus vested in the Board has made it possible to remove and keep from the state many maternity homes and other agencies whose methods would constitute a distinct menace to the welfare of the children coming under their care. The Board also has the function under the Juvenile Court Law of approval of the incorporation of any "association whose objects may embrace the caring for dependent, neglected, or delinquent children." This makes it possible to prevent the incorporation of many agencies by persons whose intentions might be entirely worthy but whose understanding of the needs for such agencies and of modern methods of child caring are lacking.

The distinct need in this field which has not yet been met by the State is the provision of a state home for dependent and neglected children. This could serve as a receiving home until foster homes are found, and as a permanent home until maturity for those normal children who are not placeable. At the 1913 session of the Legislature the Board of State Charities was authorized to maintain such a home and to receive any gift for that purpose, but no appropriation was made. It is to be hoped that funds will be provided at an early date for such a home. Eleven other states now have such homes and everywhere it has been found much superior to the system of county homes. The county apparently is too small a unit to maintain such institutions on a basis at once economical and efficient. This is especially true since all such homes are now properly regarded as only temporary stopping places for the child until a foster home may be found for him. And since the Board of State Charities has the function and the administrative machinery for finding foster homes and supervising the children after placed, it would be in the interest of economy and efficiency for the Board to be provided with a central receiving home.

There is one group of dependent children for whom the state has provided a home, namely the orphans of soldiers and sailors, the children of permanently disabled or indigent soldiers and sailors, and the grandchildren of soldiers and sailors one of whose parents is dead. Such children under

sixteen years may be received and maintained until eighteen, unless sooner discharged. Sixteen is the usual age of discharge. There are about five hundred children enrolled in the school, with ninety-four officers and employees. The work of the institution is essentially educational. In addition to the regular grade work, vocational training is given from thirteen to sixteen years of age. An agent is maintained for placing children in homes.

One of the most important steps ever taken in the interest of dependent, neglected, and delinquent children in Indiana was the establishment in Indianapolis of the Juvenile Court in 1902, later extended to the whole state. In Indiana, as elsewhere, the court was established first because of intolerable conditions attending the handling of delinquent children in the regular criminal courts. The first juvenile court in the United States was established in Chicago in 1899, and Indianapolis was one of the first cities to realize the advantages to be derived from the improved method.

The essential features of these first juvenile courts were: when a charge is made against a child, all the facts are to be investigated by an impartial officer of the court who is not primarily interested in the prosecution of the offender, but who is sympathetically interested in the welfare of the child; a trial in which many of the technical formalities are dispensed with, such as oath, plea, prosecution and defense, jury, publicity. Courts vary in the number and extent of these phases of procedure dispensed with, but in all the spirit is that of informal kindly interest, on the theory of the parental function of the state in its relation to the child.

In Indiana the court has not stopped at this point but has developed into an agency for dealing with dependent and neglected children, with truants, with parents and guardians who neglect their offspring, and with parents and any other persons who contribute to the dependency or delinquency of a child. Thus it has become in the truest sense a children's court, to guard and protect all the personal rights of the child. To accomplish this it has taken over most functions pertaining to a domestic relations court, except those dealing with divorce and alimony.

The leading features of the Juvenile Court Law of 1903, as amended in 1907, are as follows: counties of one hundred

thousand population or over shall have a separate juvenile judge, to be elected in the same way as the judge of the circuit court. In other counties the function of the juvenile court shall be performed by the circuit judge, who may hear cases pertaining to children in chambers and during vacation, thus making it practically continuous.

The jurisdiction of the court shall extend to "all matters relating to children, including juvenile delinquents, truants, neglected and dependent children, children petitioned for by the boards of children's guardians, and in all cases wherein the custody and legal punishment of children is in question."

Counties of fifty thousand population or more shall have at least one paid probation officer. Other counties may have one paid probation officer at the discretion of the court. All counties may have volunteers to serve in this capacity.

The age limit for delinquent children brought before the court is sixteen years for boys and eighteen years for girls.

There are nine possible dispositions of a case where the child is found guilty.

1. Judgment withheld;
2. Put on probation;
3. Placed in foster home;
4. Placed in public institution for dependent children;
5. Placed in voluntarily controlled institution for delinquents at expense of county;
6. Sentenced to state school for delinquents;
7. Fine imposed;
8. Judgment suspended;
9. Reparation to be made.

In all cases the child may be made a ward of the court for any period until twenty-one, except when sent to a state school for delinquents, when the school assumes guardianship.

No child under fourteen years of age may be confined in a jail or lockup or be confined with adult convicts.

The law specifically provides that the care, custody, and discipline of the child shall approximate as nearly as possible that which should be given by its parents.

In the administration of this law at least two difficulties are found, namely, the lack of special juvenile judges

and of specially trained probation officers. Marion County is the only county of the state with a population sufficiently large to fulfill the requirements of the law for a special judge. The regular circuit judge has such a variety of cases to deal with that he seldom becomes expert in handling juvenile cases. It is the spirit of the court rather than the technical methods of procedure that gives significance to the juvenile court. It frequently happens that the judge has not enough juvenile cases to become expert in handling them. Moreover, he is chosen, in almost every case, for qualities other than those that make for the understanding of childhood.

In but few of the counties of the state, outside Marion, is the probation officer, where there is one, a trained person. The work being paid for on the per diem plan necessarily gives a small salary in those counties where the cases are not numerous. It does not generally, therefore, attract persons who have had experience or training in handling children. The work of the probation officer is really more important for the success of a juvenile court than is that of the judge. The lack, therefore, of suitably trained persons in this position necessarily keeps the efficiency low. A recent law has worked still further in this direction. It permits the merging of the work of the probation officer with that of the attendance officer. The latter office is frequently at the mercy of small politics, the officer being elected in rural counties by the township trustees. By thus taking the appointment of the probation officer out of the hands of the court the standards are still further endangered.

In spite of these two difficulties, however, the establishment of the juvenile courts in Indiana must be regarded as a very great step forward in child welfare. There are two possible ways by which the difficulties might be met. Since an efficiently trained probation officer is the chief requisite, such a person might be employed by two or more contiguous counties. Or the judge might be assisted by a volunteer association working along the lines of the juvenile protective leagues of larger cities.

For the delinquent child there has been special institutional provision in Indiana since 1867-1869, at which dates there were provided for by law respectively the school for boys and the school for girls. The boys' institution, located at Plainfield, was at first called "The House of Refuge;" la-

ter the "Reform School for Boys;" and in 1903 the "Indiana Boys' School." The girls' institution was at first connected with the women's prison at Indianapolis, under the general name of the "Indiana Reformatory Institution for Women and Girls." Later the girls' department became known as the "Indiana Industrial School for Girls," and in 1903-1905 it was removed to a separate site northwest of Indianapolis under the name of the "Indiana Girls' School."

In the establishment of these schools Indiana was one of the first states to recognize that delinquent children should be treated differently from and separate from adult offenders. Separating the delinquent boys from the prison at Jeffersonville, and establishing the work for them on the basis of a school marked a distinct step in the treatment of this group of children. It was based on the theory that the delinquent child is not a criminal and is in need of instruction and guidance rather than punishment. Moreover, it recognized that a school for such purposes to be really effective in carrying out its purposes should be removed entirely from the atmosphere of the prison where the children would not live under the shadow of walls and bars. The institution at Plainfield became a model for many other states to follow and was an inspiration for a national forward movement in the treatment of delinquent boys. In some respects, however, this leading position has been lost to newer institutions because of the lack of adequate support.

"Boys are received on commitments from the courts of the State between the ages of eight and seventeen.* * * * All boys are sentenced until they reach the age of twenty-one years, unless sooner released by the Board of Control under general rules. * * * With good conduct a boy can gain his release on parole in eighteen months. The average time is a little under two years. Boys may be returned to the institution at any time for the violation of their parole while under twenty-one years of age." The Board of Control has the right to discharge finally any boy over the age of eighteen years. The present population is about six hundred. The estimated capacity is 470 with the present buildings, so it is manifestly overcrowded. "School is maintained the year round. The course covers the eight grades of the common school system." Ninth grade work is offered for a selected number. "The institution maintains the following shops and trades: manual training, printing, carpenter,

blacksmith, shoe shop, plumbing, tin shop, bakery, laundry, barber, tailor, paint shop, florist, farm and garden, telegraphy. All the furniture of the institution is built at the manual training shop. The printing office does all the job work for the institution and puts out monthly and weekly publications." The ordinary repairs of the institution are kept up by various shops' forces. "The institution owns 527 acres of land and has more than fifty buildings." The officers number sixty.⁷

The girls' school has the advantage of more recent construction and therefore conforms more to the later ideas of such institutions. It is fully abreast of the most modern schools for delinquent girls. It is built on the cottage plan and at present has nine cottages. Girls are committed between the ages of ten and eighteen years and are under the control of the school until twenty years of age. After eighteen years of age a girl who has committed a crime may be transferred to the Indiana Woman's Prison if her presence in the school is regarded as seriously detrimental to the other inmates.

A girl is released from the school on parole when she has completed a course of prescribed training, which consists of literary and domestic instruction. Homes are found for all girls when paroled and strict supervision is maintained. The number of girls in the school is about three hundred. The number of officers and employees is about sixty-five.

In addition to the two state schools for delinquent children, there are two privately managed institutions to which children may be sent by court commitment, or by boards of children's guardians, namely, the Julia E. Work Training School at Plymouth and White's Manual Labor Institute at Wabash.

The development of voluntary agencies for children in Indiana has not reached the proportions that it has in many other states. This is doubtless due in part to the rapid development of the public provisions, as well as to conditions to be mentioned below in connection with the discussion of the development of private charities. In a number of localities, however, private agencies have assumed positions of aggressive leadership in promoting child welfare. The private orphans' homes have already been mentioned.

The Children's Aid Association of Indianapolis is the

most highly developed of the private agencies. Working exclusively for children, its work includes the following: visitation and aid in homes where the welfare of the children calls for special assistance; the securing of temporary homes for children whose mothers are ill or otherwise unable to care for them; the securing of employment for boys and girls above the school age, in such positions as will be of permanent value to the children; the maintenance of milk stations for the distribution of pure milk for infants, and the instruction of mothers by nurses; securing the enforcement of laws and local ordinances that affect the welfare of children; carrying on thru exhibitions, meetings, and the distribution of literature, the education of the community in child welfare. This society is regarded as a highly efficient type of the modern voluntary association for promoting the welfare of children.

At Evansville and South Bend societies have been organized for the maintenance of milk stations for infants during the summer. The Free Kindergarten Association and the Girls' Industrial School, both of Indianapolis, carry on work primarily educational, but both minister largely to the children of the poor. The Summer Mission for Sick Babies, of Indianapolis, cares for sick infants during the summer and gives instruction to mothers in child caring. In a number of the cities of the state are day nurseries to keep the children of mothers who work away from home during the day. Boys' club work and the Boy Scout movement are highly developed in Indianapolis and to a lesser degree in several other cities. In Evansville a number of churches have organized to carry on a vacation school, for the instruction and recreation of children who cannot be taken on summer vacations from the city.

III. Defectives.

The term Defective is used to designate any person whose physical or mental powers or condition are such as to render him in need of special treatment or care. Those usually included in the group are the blind and deaf, the insane, the feeble minded, and the epileptic.

The blind and deaf who are sound in mind are frequently not included in this group, altho technically they may be so grouped. The provision for those of school age is primarily an educational one and thus a part of the state school

system. The Indiana School for the Blind and the School for the Deaf are located at Indianapolis. The schools are open to all blind children and deaf children respectively, of suitable capacity, between eight and twenty-one years of age. Attendance is compulsory for children eight to sixteen years of age. The institutions are charitable in that the state provides board and washing for the pupils, in addition to the regular school facilities. The common school branches are taught and instruction given in several industrial trades. In the School for the Blind there are about 120 pupils, in the School for the Deaf about 290. The numbers vary slightly from year to year, but they have remained approximately the same for a number of years. Thus the number proportionate to the population is slightly decreasing.

By an act of the Legislature of 1915, a much needed provision was made for the adult blind of the state. Previous to this time the state did nothing for any blind, except those of school age. This recent measure appropriates \$10,000 annually for the use of a Board of Industrial Aid for the Blind. This board is to act "as a bureau of information and industrial aid, the object of which shall be to aid the blind in finding employment and to teach them industries which may be followed in their homes, and to provide such means for the development of such industries" and for marketing the products. This will involve the establishment of workshops for the blind where instruction and employment will be given. Another law provides for the purchase of the products of these workshops by state and county institutions. When these laws have become fully operative, no blind person in the state, of otherwise normal abilities, need be without means of self support.

Indiana in its constitution has assumed the duty of providing state care for all her insane. Very extensive and generous efforts have been made in that direction, but the responsibility has never been fully met. The method of commitment is by an insanity commission, consisting of a justice of the peace and two reputable practicing physicians. The finding of the commission is filed with the clerk of the circuit court, who is responsible for the patient between the filing of the finding and the receiving of the patient by the State Hospital. In very few of the counties is there any proper provision for detaining insane patients during the

investigation of the commission and until removal to the State Hospital. The jail, which is used in most cases, is very undesirable, since it generally aggravates the nervous condition of the patient. The state provides the entire cost of maintaining the State Hospitals, except clothing and transportation.

The geographical method of classification of patients is used, instead of one based on the nature of the patient's needs. The state is divided into five districts, each served by a hospital for the insane, which receives all kinds of insane patients from the surrounding district. The Central Hospital at Indianapolis, one of the largest of its kind in the United States, serves a territory of twenty-two counties; the Northern Hospital at Logansport, sixteen counties; the Southern Hospital at Evansville, fifteen; the Eastern Hospital at Richmond, sixteen; the Southeastern Hospital at Madison, twenty-three.

The buildings, with the exception of the Central Hospital, are modern and well equipped for treatment, as well as for custodial care. The Central Hospital has a pathological laboratory, completely equipped for scientific study and investigation, and maintains a lecture course for physicians and medical students. They are all, however, overcrowded, and the treatment of acute and curable cases is seriously handicapped by the presence of large numbers of chronic cases. In spite of the extensive provision for the insane, the growth in numbers has progressed faster than the facilities for their care. And if the present method of meeting the need is continued it is doubtful whether the state will ever catch up. There are in the neighborhood of one thousand insane persons in the state not receiving state care. Some of these have been adjudged insane by the courts and are being detained under various undesirable conditions until room is found for them in the hospitals. Between four and five hundred are in poor asylums where no adequate facilities are available for their care. Practically the only hope of the state ever providing care for all who need it, as well as giving proper attention to incipient and acute cases, lies in changing the method of building new hospitals on the present plan. Farm colonies for the able-bodied chronic insane, and for certain groups of the acute cases, are now recognized by students of the problem to be at once the most economical and efficacious method of

dealing with them. These colonies should be connected with the hospitals and under their management. Such a plan makes it possible to give outdoor occupations to a large number who are in this way much benefited physically and who are maintained much more economically. It also relieves the hospital facilities of its overburden so that proper treatment can be given those who can be benefited by it. The colonies can be enlarged to take in increasing numbers with a very slight increase of cost. A beginning has been made in this direction at the Eastern Hospital. A farm of 421 acres has been provided, and the results have fully justified an extension of the plan to the other hospitals. It is probable also that the strict adherence to the geographical principle of classification should be abandoned, so that different hospitals might specialize on particular types of treatment. This would doubtless both reduce cost and increase efficiency.

In the care of the feeble-minded Indiana has, as all other states, gone much slower than in that of the insane. Here, as elsewhere, the slowness is doubtless due to the fact that it is only recently that the feeble-minded have come to be recognized as a social menace. Since 1890 there has been maintained at Fort Wayne the State School for Feeble-Minded Youth. It is open to feeble-minded, idiotic, epileptic, and paralytic children under sixteen years of age. Entrance to the school is voluntary for the parents and guardians of the children. But since the school is greatly overcrowded many applications must be refused, and a long waiting list is maintained. The school also provides a department for feeble-minded women between the ages of sixteen and forty-five years, who are committed by the circuit courts. The children who are capable of receiving it are given literary, manual, and industrial training. A farm of over five hundred acres furnishes outdoor colony work for the older and stronger males. The long waiting list at the school is no adequate measure of the number of feeble-minded in the state. As early as 1907, Mr. A. W. Butler, Secretary of the Board of State Charities, speaking before the National Conference of Charities and Corrections, reported among other facts the following taken from a study of the records of state and county institutions: "803 families, selected because of feeble-mindedness in one or more generations were found to consist of 3,048 members, an average of

3.79 persons to each family. 67 per cent of the males and 70 per cent of the females are known to have been at some time or other inmates of public institutions in Indiana, principally county poor asylums."

"In one feeble-minded family on our records, from a rural neighborhood, we have in direct and collateral membership 111 persons, belonging to five generations. Practically all of them are so deficient mentally they cannot do the ordinary work of the public school."

"Approximately one-third of the poor asylum population of my own state is composed of such defectives."

"As is to be expected in many of the orphans' homes, a large number of the children come from feeble-minded parents."

"In a careful study recently made of the prisoners at the Indiana State Prison it was found that in a total population of 926, 114 or 12 per cent were insane, epileptic, or decidedly feeble-minded. It is a significant fact that 30.5 per cent of these 114 defectives were committed on such crimes as murder, manslaughter, and rape, while in a total of 2,365 consecutive admissions examined the percentage of commitments for this class of crime was found to be but 14.6 per cent. In other words, the percentage of commitments for crimes against the person is more than twice as great among defectives as among persons not so classed."⁸

In more recent years reports or careful estimates made at the Boys' School, the Girls' School, and the Reformatory indicate that in the neighborhood of one-half of the inmates are so defective in mentality as to be unfit to return to the responsibilities of free life. Yet the laws of the State require them to be released from the institutions when they have completed their terms.

These facts show that a large part of the pauperism and crime of the state is due to feeble-mindedness. No accurate account of the number of such persons in this state or elsewhere has been taken, but conservative students of the problem have estimated from 200,000 to 300,000 in the United States. We have every reason to believe that Indiana has her full share of this number. From the estimate we would have approximately 4,500 feeble-minded persons in the state. This includes all grades: idiots, imbeciles, morons. Of this number the School is caring for

about 1,300. The others are in and out of poor asylums, in and out of penal institutions, repeatedly on the lists of public relief officials and of private charitable agencies.

And not only are these individuals a burden to the charitable and correctional agencies of the state, they are reproducing at a rate much faster than the normal population. This means that failure to care for them is simply piling up for the state increasing burdens of pauperism and crime. It is generally recognized now that cure is out of the question and that only a very limited education is possible.

The state should first have made a careful study to discover the extent and nature of the problem so that it might approach a solution with intelligence and comprehensive insight. It might then proceed to extend the farm colony method of custodial segregation, already demonstrated a success at the State School, and possibly extend the operation of the present law for the prevention of reproduction by surgical operations. This law provides for a simple operation (vasectomy), to be performed on certain criminals, rapists, perverts, and feeble-minded, at the discretion of the superintendents of the institutions where these persons may be confined. The execution of the law has been held in abeyance for a number of years out of deference to the wishes of a state executive who was opposed to it. Before that time somewhat over eight hundred operations had been performed.

The feeble-minded constitute a group within the state that is probably the most important single group of all those dealt with in the field of charities and correction. At least it has the most far-reaching influence on the whole burden of crime and dependence, and yet our total effective treatment to date is represented by one institution with a capacity of about thirteen hundred, and one law for sterilization for certain selected cases which at present is inoperative.

In the care of the epileptic the state has made an excellent beginning. The Village for Epileptics located at New Castle has a tract of 1,245 acres for the development of a farm colony. The purpose of the institution is "the scientific treatment, education, employment, and custody of epileptics, all epileptics having a legal settlement in the state to be considered admissible." The plan has been to build the institution up slowly and inexpensively, utilizing as far as possible the work of the inmates. In order to confer the

greatest benefit the institution has begun by receiving first those most capable of improvement.

A recent act of the Legislature provides for the erection of buildings for females. While up to date the colony is caring for only a small part of the epileptics of the state, the gradual growth of the institution insures a certain approximation of complete care. The latest reports indicate that there are about one thousand inmates of public institutions in the state who are epileptics, and it is estimated that there are probably as many more in their homes. It will be a number of years at the present rate of growth before all these are cared for in the colony.

IV. Medical Charities.

Medical relief of the poor is a part of the public outdoor relief and is under the administration of the township trustee. Application is made to the trustee, and a regular physician is sent. Different physicians may be employed by the trustee, each being chosen for the particular case. In some cases contracts are made by the trustee. Sickness, together with burial, constitutes over half the causes assigned in the applications for outdoor relief. The County poor asylums are attended by physicians whose services are contracted for by the county commissioners.

The State has established at Rockville a Hospital for the Treatment of Tuberculosis, with a stated capacity of one hundred patients, altho over that number are cared for at one time. Only incipient cases are received. Pay patients may be admitted, altho the preference is given to indigent or partially indigent citizens of the state. The township trustee pays for transportation, and a fixed amount is given by the county for each indigent patient. It is evident that an institution of this size is entirely inadequate for those citizens of the state who are unable to pay for proper treatment to arrest the disease. A recent law makes it possible for counties to establish tuberculosis hospitals. Marion County is already proceeding under this act, and it is probable that other counties will also avail themselves of the opportunity. Experience in other states indicates that the counties and municipalities must assist the state in providing facilities for treating tuberculosis if the disease is to be effectually controlled. It is particularly important to have public free hospitals, because such a large percentage

of those afflicted come from the poorer classes of society, and private benevolence cannot be depended upon to provide institutions.

The Robert W. Long Hospital, situated at Indianapolis, was built by private benevolence, and is owned and maintained by the state. It is for the use of the people of the entire State, as the city hospital is provided for the citizens of a city. Persons of limited means or those unable to pay anything, from any part of the state may secure here expert medical and surgical care.

The state is fairly well provided with general hospitals, most of which do some charity work. The larger municipalities maintain city hospitals, as do several counties. There are fifty-seven hospitals and sanitarium listed in the state. Several of the larger cities maintain free dispensaries, but that of Indianapolis alone is highly developed.

District nursing has not been widely extended in Indiana. A branch of the Public Health Nursing Association has been established in Indianapolis and is gradually building up free visiting nursing, altho the number of nurses employed by it for free cases is yet very small. Various private agencies, such as social settlements and charity organization societies, have employed visiting nurses for free work in Indianapolis and for four or five other cities. This work for the state as a whole, however, is yet meagerly developed.

The development of a comparatively new type of medical charity has taken place recently in Indianapolis, namely, the Social Service Department of Indiana University. This was first established in connection with the Indiana University School of Medicine and Indianapolis City Dispensary. Since the establishment of the Long Hospital its work is extended to cover the free patients there also.

Medical social service has evolved from a realization that the patients who come to a dispensary or to a hospital frequently need something more than mere medicine or even medical attention. Very frequently their trouble lies in some undesirable circumstance connected with their social relations or methods of living. Even when they need medical care they need to be followed back to their homes or places of work to see that they profit by the expert service rendered, so that they do not need to come back again for the same or similar troubles. Medical social ser-

vice undertakes to oversee, guide, assist, and render any service necessary in the conditions of living or working that are vital to the health of the patient. When first established in 1911 the department at Indianapolis was one of a very few such pieces of work in the United States. Since then a number of others have been started. The extension of the work to the whole state thru the Long Hospital is a unique and important departure.

Two voluntary associations have branches in the state for the promotion of educational work in the field of health. The Society for the Study and Prevention of Tuberculosis and The Social Hygiene Association. The first of these has extended its organization into a large number of the counties of the state and is active in stimulating interest in the anti-tuberculosis movement. The other is but recently established in the state.

V. The Adult Delinquent.

The Constitution of Indiana specifically states that the punishment of offenders in the State shall not be based upon the idea of retribution or vengeance. The measures devised for punishment may be said fairly to carry out this principle. There are four penal institutions for adults. The Reformatory at Jeffersonville receives men between the ages of sixteen and thirty who have been convicted of felonies other than treason or murder in the first or second degree. It is organized essentially on the principle of reformation, and to that end provides instruction in letters and in trades, besides the disciplinary regime, military drill, recreation, and the work of the chaplain. In 1912 it established a psychological clinic for the study of the mental and physical conditions of the prisoners. The results of this study are used in reaching a more accurate understanding of the particular needs and adaptabilities of the individual. The department is one of a very few of such departures in the United States, and is regarded as a decided step forward in scientific penology. The great need of the Reformatory is a farm to provide outdoor occupations for the prisoners and for raising a considerable part of the supplies used. The number of inmates of the Reformatory is about a thousand.

The State Prison at Michigan City receives men over thirty years of age, convicted of felonies, and all those con-

victed of treason or murder in the first or second degrees. It maintains a separate department, the Hospital for Insane Criminals. The principle of reformation is not so thoroly carried out in the organization of this institution as in the Reformatory. There is no attempt to teach trades and the school is conducted only a part of the time, with incomplete facilities for instruction. Military drill is provided, a weekly half-holiday is allowed, and religious instruction given. The population is about twelve hundred. All executions in the state are performed here by means of an electric chair.

The Woman's Prison at Indianapolis has a penal department for women over eighteen years of age convicted of felonies, and a correctional department for women convicted of misdemeanors. If "the imprisonment adjudged is ninety days or less, or if the fine and costs assessed when not paid or replevined, would not require the defendant to serve more than thirty days" the court has the option of committing the offender to the county jail or to the correctional department. The Superintendent and members of the Board of Trustees must be women. It is unfortunate that more judges of the state do not send women misdemeanants to the correctional department rather than to county jails where the facilities for properly caring for women prisoners is very inadequate. Over one thousand women yearly serve sentences or lay out fines in county jails when they might secure much better treatment at the Woman's Prison. This institution, the first of its kind in the United States, is still recognized as a model. It would accomplish better work in the correctional department if the term of commitment were longer. The present system of short terms gives little opportunity for thoro reformatory work.

The State Penal Farm in Putnam County is the newest state institution. It is to receive all male persons, above sixteen years of age, who have been convicted of the violation of any criminal law of the State or of any ordinance, the punishment for which has previously consisted of imprisonment in any county jail or workhouse. Where the sentence would be sixty days or less the court has the option of sending the person to the Farm or to the jail or workhouse. It marks the last step in the efforts of the state to assume control of all offenders. The county jails, which, in Indiana as in other states, have been used for the

incarceration of misdemeanants and petty offenders, has come to be recognized as the most undesirable feature of penology in the United States. Altho the District of Columbia has a similar institution, Indiana is the first state to undertake this forward step toward a more efficient and economical treatment of minor offenders.

The plan being followed is to build the institution slowly, erecting only inexpensive buildings. Expert convict labor is furnished from the State Prison and the Reformatory. These, together with the men sent to the Farm, are doing practically all the constructive work. The tract of over sixteen hundred acres will furnish varied outdoor employment for about one thousand short-time offenders. A larger number are being sent to the Farm than was expected for the first few years, and some adjustment will have to be made to prevent overcrowding. Ultimately, if the experiment proves as successful as is now apparent that it will, other similar farms must be provided. Indiana has decided that the jail as a place of punishment must go.

In the three first named penal institutions the problem of the employment of the prisoners is an important one. The following from "The Development of Public Charities in Indiana" describes the situation:

"With few exceptions all the prisoners at the Indiana State Prison, the Indiana Woman's Prison and the Indiana Reformatory have some occupation. At the State Prison at Michigan City, practically half the population is employed under contract at a per diem or under the piece price plan; most of the remainder are employed on state account either in the manufacture of binder twine or in new construction work. At the Woman's Prison at Indianapolis, those not engaged in caring for the institution are employed in laundering and sewing. At the Indiana Reformatory, at Jeffersonville, what is called the trade school plan has been adopted. At neither the Indiana Boys' School nor the Indiana Girls' School is the labor of inmates employed for revenue. * * * * *

"The law enacted in 1909 authorizes the State Prison management to contract for the labor of 600 men and fifty per cent of the population above 800, no contract to extend beyond October first, 1920. This law provides that 'such convict labor shall be employed at such trades and industries as shall least interfere and compete with outside labor and industries in the state of Indiana.' * * * * *

"The law governing the employment of the Indiana Reformatory inmates contemplates that only such industries shall be installed as can be used to good purpose in teaching the young men a means of livelihood; also that the articles manufactured shall be supplied so far as possible to the various institutions and civil and political divisions of the state, the surplus to be sold on the market. Two former contracts, hollow ware and shirt, are now operated on the trade school plan. The inmates have also manufactured considerable tinware, clothing, shoes, mops, brooms and furniture for the various state institutions, as well as a large amount of the equipment of the new Southeastern Hospital for Insane."⁹

Not all persons convicted of offenses in the courts of Indiana are imprisoned. The adult probation or suspended sentence law makes it possible to reclaim many offenders without the disgrace to them and the expense to the State of sending them to prison. The following report by the Board of State Charities indicates the method of the operation of the law and its report:

"Judges of the several circuit and criminal courts are authorized by this law to suspend the sentence of persons convicted of felony or misdemeanor or who have pleaded guilty to such a charge, except for the crimes of murder, arson, burglary, rape, treason, and kidnapping.

"As far as this law applies to misdemeanants there are no available statistics of results. When the sentence is to one of the state prisons or the reformatory, however, the probationed offender is thereafter in the legal custody and control of the institution to which he would have been sent, and is subject to the rules and regulations governing paroled prisoners. Of this class the institutions named keep accurate record.

"The law has now been in force seven and a half years. Its results, so far as known, are seen in the following. * * * In the time indicated sentence was suspended in the case of 1,458 men and women, 480 of whom otherwise would have had to go to the State Prison, 942 to the Reformatory, and 36 to the Woman's Prison. The law provides that if these persons on probation violate their parole, the original sentence shall be carried out. This was done in the case of 145 prisoners, while 298 others who were delinquent had not been apprehended to the close of the fiscal year. These 443 delinquents constituted 30.38 per cent of the whole number placed on probation."¹⁰

When sentence is suspended the probationer is under the direction of the parole officers of the institution to whom he would be sent if imprisoned.

Another important feature of the Indiana penal system is the so-called "indeterminate sentence." "All persons committed to the two state prisons and the Indiana Reformatory are given an indeterminate sentence, with privilege of parole, unless convicted of a crime, the penalty for which is life imprisonment. This law has been in operation at the State Prison and Reformatory since 1897 and at the Indiana Woman's Prison since 1900. * * * * * These laws give the prison authorities an opportunity to release prisoners who are deemed capable of becoming law-abiding citizens and to retain for a longer period those who have not shown satisfactory evidence of reformation. In actual practice this has resulted in considerably lengthening the average time of service in prison. A study of the records of the State Prison has brought out the fact that the last three hundred men received under the old form of definite sentence served an average of one year, nine months and fourteen days. The first three hundred received under the indeterminate sentence law served an average of three years, two months and twelve days, or one year, four months and twenty-eight days longer. A similar study of the Reformatory records discloses an average sentence of one year, eight months and twenty-two days under the old law; two years, four months and six days, or seven months and fourteen days longer, under the new. When it is understood that this increase is due largely to the longer time served by men convicted of such crimes as incest and rape, the figures have an added significance."¹¹

The following statement has been issued concerning the working of the law:

"Only such prisoners as are deemed capable of becoming law-abiding citizens and who have served their minimum sentence are released from prison under the parole law. Even then the release is conditional and for as long afterward as is thought advisable, within the limits of the maximum sentence, they are kept under supervision. Usually one does not receive final discharge until he has a satisfactory record of at least one year in freedom. The law, therefore, provides the state with a practical means of testing

one's profession of reform before actually releasing him from custody.

"In the eighteen years that these laws have been in operation 9,034 men and women have been released under their provisions, an average of about 500 annually. The Reformatory has paroled 5,365 prisoners, the State Prison, 3,414, and the Woman's Prison, 255. Only 26 per cent of the whole number violated their paroles.

"Most of these paroled prisoners were unemployed when their offense was committed. As a rule they were not regular wage earners. In prison they were taught habits of industry and they were not paroled until work was found for them outside. The reports indicate that during the time they were on parole they earned for themselves the sum of \$2,530,199.40 to which should be added board and lodging received by many. After paying all their expenses they had on hand or due them at the time they ceased reporting an average of \$50.30 each. Instead, therefore, of being a charge upon public support they were earning their own living and saving money.

"Of the 9,034 prisoners paroled, 5,422 served their parole period satisfactorily and were given final discharge; 459 were discharged because their sentences expired while they were on parole; 154 died and 618 were under supervision at the time of the report. This leaves 2,381 delinquents, constituting 26 per cent. The percentage of unsatisfactory cases was 25.7 at the Reformatory, 27.2 at the State Prison and 28.6 at the Woman's Prison."

The county jails of Indiana, of which there are ninety, are in much the same condition as those of other states in the Middle West. They are regarded by all students of penology as a most undesirable feature of our penal system. The following report accurately describes the situation:

"The jails range from the old type, many of which are insanitary and unsafe, to modern structures with the best sanitary appliances and provision for a good classification of prisoners and a complete separation of sexes. Many of the older jails are weak, poorly planned structures, unsafe not only for prisoners but officers as well. The arrangement of some permits prisoners to have access to the outside corridors where they may readily communicate with their friends. Often tools and weapons which aid them in making escape are passed from the outside. In some of

the well planned jails prisoners are permitted in the corridor. This is never safe and should not be allowed. Recently a prisoner in one of the newer jails was handed a stick of dynamite with which he blew off his head. From time to time reports reach us of assaults made upon officers by prisoners who are given the liberty of the jailor's corridor. Many of the jails are without proper provision for classification of prisoners and in some where this provision is made no attention is given to the matter. According to reports, fifty-one jails make little or no classification of their prisoners except to separate the boys, girls, and women from the men. A number of the jails have inadequate provision for sex separation and six have no special provision for women.

"The law which prohibits the keeping of children under fourteen years of age in any county jail is generally complied with, but frequently older boys are allowed to mingle with confirmed criminals.

"Some of the jails are built on the old penitentiary plan with cell blocks which afford very little opportunity for classification of prisoners. The stone cells are dark and practically without ventilation. Some of the jails now in use were built years ago when the population was much less than now, and are inadequate for present needs.

"Some of the jails are without proper sanitary appliances and there are seventeen in which wash tubs are used for bathing. In some of the jails having bath tubs there is no provision for hot water. Under these conditions is is not a matter of wonder that the tubs become foul and unhealthful.

"There are a number of good jails in the State. The arrangement of some is not altogether satisfactory, but on the whole they are generally good and some are excellent. Among those may be mentioned the jails in Cass, Grant, Miami, Fulton, St. Joseph, Lake, Laporte, Tipton, Jay, Warren, Vermillion, Vigo, Knox, Greene, Lawrence, Owen, Jackson, Franklin, Rush, and Sullivan counties. The latter is good in most respects but does not have suitable provision for women. A number of other jails, while not so satisfactory as to arrangement are usually found clean and well administered and adequate for the use of the counties in which they are located. Under this class may be mentioned those in Randolph, Henry, Adams, Huntington, Noble, Steuben, Elkhart, Lagrange, Wells, Parke, Morgan, Clay, Fayette and Floyd counties.

"Each jail, with one exception, is attached to a residence which is provided for the officer. In most counties this residence is occupied by the sheriff. Under the law the sheriff of each county is responsible for the care of the jail and prisoners. Some sheriffs give the jail their personal attention and manifest much interest in the care of the property and prisoners. Others give the jail very little attention. Some who want to conduct their jails properly have poor facilities and receive little support from the county authorities. In twenty counties jailors are employed. The law requires the larger counties to have a matron to have charge of the women and juveniles.

"An act of 1909 makes it the duty of the Board of State Charities to formulate necessary and proper rules for the government of jails and control of prisoners, such rules to be adopted by the judge of the circuit court, and certified copies of same to be furnished the sheriff. In forty-four jails these rules were in force at the time of inspection. In five other counties the rules had been adopted but were not posted in the jail and in a few, rules have since been adopted. Three jails have printed rules formulated by the sheriff. Thirty-eight jails had no printed rules.

"Provision is made by law for the employment of all able-bodied male prisoners sentenced to jail, or who may be there for the non-payment of fines or costs, upon the public highways or at any other work or improvement for the public good or benefit. There is also provision for the maintenance of a workhouse if it is needed. Marion County is the only county which has a workhouse independent of the jail.

"The sheriff furnishes the food for the prisoners, for which he receives forty cents per diem. In a number of the jails, where but few prisoners are kept, the prisoners have practically the same food as the sheriff's family. In others it is plain but suitable, and in some it is reported insufficient.

"Some of the jails are used as lodging houses for tramps and in some they are fed at the expense of the county. In some counties they are received only upon arrest, while in others they are admitted and discharged by the officer in charge of the jail. This is not only a poor practice but is illegal. Thirty-seven jails report that no tramps are admitted."

"The county commissioners are required by law to visit the jail once in three months, and to examine carefully into the manner of keeping the same as to cleanliness and sanitary conditions and as to any needed repairs or improvements. The majority of the boards comply with this law but some

do not visit regularly and a few only when urged to do so by the sheriff, who wishes to point out the needs of the jail. "Under the law the sheriff is required to make a report in writing at least quarterly to the board of county commissioners of the condition and needs of the jail and at the beginning of each term of court he shall make a report to the court, showing the name of each person confined in the jail, the date of commitment, by whom committed and the offense and term. A number of sheriffs comply with this requirement, others do not.

"There has been improvement in the jails during the past few years and considerable change was noted in some at the time of recent visits. Some are in most respects as satisfactory as the system will permit. Others are a disgrace to the county and the State. One of the objectionable features is the large number of men serving sentence in idleness."*¹²

VI. Administration.

One of the most important aspects of Indiana's system of charities and correction is the work of the Board of State Charities. This is a board of six members, bi-partisan in form but non-partisan in fact. Appointed by the Governor, the members serve without salary, but are paid traveling expenses. The Board employs a paid secretary and staff of assistants, and has its office in the State House. The Governor is ex-officio a member of the Board. The function of the Board is: to investigate the whole system of public charities and correction in the commonwealth, including both state and county institutions and activities; to report and publish information concerning conditions found; to give suggestions and advise to the officials in charge of the various institutions and activities; to recommend legislation bearing on any problem of charity and correction; to supervise all children placed in private homes by any public or private agency; and to investigate and pass upon the establishment or continuance of any public or private agency dealing with the care or placing of children. The secretary of the Board is ex-officio member of the State Board of Truancy, which is concerned with the enforcement of the compulsory education law.

*With the establishment of a State Farm for male midemeanants it is hoped that the number sentenced to the county jail will be greatly reduced.

It will be seen that the Board is primarily an investigating and supervising agency, rather than an administrative or controlling body. In its relations to maternity hospitals and child caring agencies it has powers of control, but in other respects it has no power of compulsion except that of access to all facts for purposes of investigation. The various state charitable and correctional institutions are controlled by separate boards, appointed by the Governor. They employ superintendents, purchase supplies, and determine the whole policy of the institutions. The only influence, therefore, which the Board of State Charities can exercise over them is that of expert advice and public opinion.

And yet it is generally recognized that this Board has been the greatest influence in raising the charities and correction of Indiana to a level where they have in some respects become national models. If we inquire into the reason for its immensely great influence, in spite of its small powers of compelling the adoption of its recommendations, we find it first in the nature of the principle on which it is based, namely the power of tactfully presented, sane, expert opinion to win a hearing. By mediating between the institutions and the citizens of the state it protects the former from unjust criticism and accusation and effectually focuses the will of the latter on the legislature and institutions and public officials, while leaving to them large opportunities for initiative and handling of details. Few better examples of a genuine democratic control could be found. It is one of the best expressions of the spirit of American democracy that we have.

On the other hand, the explanation of a part of the effectiveness of the Board is to be found in another direction, namely, the personnel of the Board and the staff of employed secretaries. Boards elsewhere similarly constituted have not always secured the same measure of success. A recent writer maintains that better results have been obtained in Indiana than in New York under a system nearly similar, and better than in Iowa under a system in which the state board has complete administrative control.

He concludes: "In attempting to draw deductions from the conditions found under the three systems, it should not be hastily concluded that because conditions were found to be excellent in Indiana the type of supervision there main-

tained would be the most advisable form for other states. The success in Indiana probably can be largely explained by the fact that there has been on the membership of its Board of State Charities, for a long period of years, men of exceptional judgment and devotion. These men have selected and retained in the office of secretary of their Board, men of marked ability, each of whom has gained a national reputation for knowledge and wisdom with regard to the management of the various classes of state institutions. The advice of these men has had a marked influence over the administration of the various institutions in the State of Indiana."¹³

An important question always raised concerning public charities and correction is, to what degree are they the victims of the spoils system of politics. The charitable and penal institutions have been a favorite field for the activities of the spoils politician. The unfortunate public wards in all states have been used to furnish jobs and plunder for party henchmen. Indiana has in the past had her share of this evil. A history of the politics connected with the charities and correction of this state would relate much to make any righteous citizen blush. But in recent years very considerable progress has been made toward improvement. Since the organization of the Board of State Charities in 1890 the movement toward the merit system has been rapid, with respect to the state institutions. Not more than two members of any of the boards may be members of one political party. The salary of \$300, being merely nominal, does not tempt the henchman to a place as a board member. In the last few years a number of appointments have been made to superintendencies of state institutions that have shown many indications of being political appointments, but in no case has the individual appointed been a dishonest or inefficient person. The purchase by contract seems entirely to have eliminated the graft formerly connected with this phase of institution administration. On the whole, the progress toward the elimination of politics in respect to state institutions and activities, is very gratifying. In county and township charities, however, politics has much influence. Elective officials are all chosen on a purely partisan basis, and frequently with little consideration of the fitness of the candidate for administering charitable and correctional activities. All appointive officers that have to do with these

activities are also chosen on political grounds. We apparently have some years yet to wait for the adoption of the merit system in this as in other branches of local government.

In the field of private charities, the situation in Indiana is very similar to that of other middle western states. Until recently it was chiefly a rural state, and even yet its largest city is under three hundred thousand, the three next largest not over seventy-five thousand each. Private charities of the more highly organized type are usually the products of urban conditions and generally of cities of considerable size. Except in three or four of the larger cities, therefore, there are no communities in the state that show a high development of private charities. Moreover, the support of private benevolences comes largely from persons who have laid aside some surplus, and this is a phenomenon of older manufacturing communities, rather than of rural or small town life.

It is probable, however, that some explanation must also be sought in other directions. The individualism of the Middle West has made the formation of voluntary coöperative activities of all sorts difficult. Private charities depend on the spirit of community effort to meet local problems. Public spirit must be behind such enterprises, unless they are supported by the gifts of a few wealthy individuals. Local public spirit is not strong in the Middle West, and so private charities, as well as all voluntary coöperative effort, have been neglected. At the same time the midwesterner has not been as afraid of his government as the easterner. He has seen no objection to having the government do all that he could put on it. And if the government showed a tendency to assume responsibility he saw no reason for voluntarily assuming it himself. We have seen the great extent to which public agencies in Indiana have assumed responsibility for charitable activities. Doubtless this excellent tendency partly explains the backward state of development of private charities.

But whether the explanation is to be found in the rural character of the population, in the absence of surplus wealth, in an individualistic frame of mind, or in the high development of public charities, or to some extent in all these, the fact remains that Indiana is lacking in many of those vol-

untary philanthropic enterprises of an organized sort that characterize other American communities.

A factor that has been most valuable in Indiana is the annual Conference of Charities and Correction. This is a meeting for four days of professional social workers, members of state boards, and county and township officials having to do with philanthropic and correctional work, and public spirited citizens, for conference and discussion. Few important forward steps have been taken in the last two decades which have not been first discussed at this Conference. It is essentially educational in character and is valuable not only for those attending, but by meeting in different cities and towns it brings to the various local communities a broader intelligence about and a deeper interest in the problems under discussion.

We are now ready to ask, what has Indiana contributed to the nation in the field of charities and correction? We list below the more important items. In many of these Indiana does not stand entirely alone, but in all she has been conspicuous and in some unique. Of course, Indiana, as all other states, has followed and is still following in some things a penny-wise and pound-foolish policy. Especially is this true in the failure to adopt a more comprehensive and adequate policy for the cure, control, and prevention of mental defectiveness. But, taken altogether, she occupies an honorable place among her sister states. The following list is arranged in neither a chronological order, nor the order of importance of the items.

Indiana was probably the first state to use the term Hospital for institutions for the insane. The name is significant as indicating a modern attitude toward the care of those afflicted with this disease.

She was the first to use the system of county boards of children's guardians, a step that has been not only of great value to the dependent and neglected children of this state, but one that has had noticeable influence in other states.

She was the first state to recognize the need for a separate state prison for women and to erect and maintain a model institution of this kind.

The first farm colony for the feeble-minded was established in connection with the School for Feeble-minded Youth at Fort Wayne.

The Indiana township poor relief law was the first to centralize this important function and bring it under an efficient system of investigation and reports. It has served as a model for other states.

The completeness of the centralized control over all children who become public wards is unique in Indiana. While other states make use of the same principle, no other state has so completely centralized this control.

The license system for maternity homes and other child helping agencies in many states is connected with the Board of Health, thus making it primarily a health feature. In Indiana the larger social significance is also recognized by placing the authority in the hands of the Board of State Charities.

The City Court at Indianapolis when presided over by Judge Collins attained a prominence essentially national in significance, because of the extent and great success of the system of paying fines by installment and the suspension of sentence. While neither of these is entirely unique, the unusual success attained by Judge Collins in these two methods is worthy of notice.

Indiana is the first state to assume toward all state prisoners the attitude which the federal government assumes toward all federal prisoners, namely centralized control of the whole process of punishment. The first step in this was the establishment of the state workhouse for women as the correctional department of the Woman's Prison. The second step was the placing in the hands of the circuit judge the power to establish rules for the conduct of the county jails. The third step was the establishment of the State Penal Farm. Ultimately this will lead to the abolition of the county jail as a place of punishment.

The meeting of the National Conference of Charities and Correction in Indianapolis in May, 1916, is significant. This organization contains in its membership over two thousand persons engaged as professional or volunteer workers for social betterment. It is the largest meeting of the kind in the world. Its meeting in Indiana with an Indiana President, Father Francis H. Gavisk, is a recognition of the prominent place the state occupies in this work. It is also a challenge and inspiration to all forward looking citizens.

CHAPTER XII.

Education

As the Constitution of 1816 failed to make free education compulsory upon the community, the teaching of Indiana children was long a private matter, left to the parents or to chance. The need for instruction was met in various ways, sometimes by free schools, as at New Harmony, frequently by county seminaries, and occasionally by private academies or colleges. It was not until 1848 that the people finally awoke under the agitation of Caleb Mills, Robert Owen, John Morrison, and others, and by a vote of 78,523 to 61,887 made possible tax-supported free schools. Three years later a new constitution compelled the general assembly to provide free public education. From that time until the present the school system of Indiana has been making progress, often discouragingly slow but always drawing toward an unformulated advancing ideal.

The immensity of the educational system of the state can best be appreciated with the aid of a few figures. During the year 1913-1914 the public school enrollment was 548,497 and the average daily attendance was 441,168. These pupils were under the instruction of 18,499 teachers and met an average of about one hundred sixty days in 8,784 school plants worth \$49,000,000. During the calendar year 1914, the total school revenues reported to the State Board of Education amounted to over seventeen million dollars.

Finances of the Public Schools.

Altho the financing of the public schools of Indiana is a complicated matter, it may be worth while to set forth a few of the essential facts. In accordance with the great "Ordinance of 1787" the sixteenth section of each congressional township in the state was reserved for the use of the

schools. The sales of these lands have netted a little less than two and a half million dollars (\$2,480,941.51) and are maintained intact as the Congressional Township Funds. A number of other separate sums including \$573,502.96 received by Indiana when Congress distributed the surplus in the Treasury in 1837, \$48,943.13 received from the salt lands given the State by Congress in 1816, \$56,160.13 the proceeds of the tax on the State Bank, \$5,776,139.81 a residue left from the Sinking Fund accumulated by the State to meet its payments for stock in the State Bank, sums received from the sale of county seminaries established under the act of 1818 and abolished under the law of 1849, and various other small amounts have been combined in what is known as the Common School Fund. This fund amounted to about nine million dollars in June 1914. It is distributed among the counties, which are responsible for its safe investment on good security.

The State further assists education by levying a regular tax of \$0.136 on each one hundred dollars worth of assessed property and a poll tax of fifty cents.* Five and two-tenths per cent of this amount is set aside to aid poor school corporations which impose a twenty-five cent tax to maintain schools for six months, and for corporations levying a fifty cent tax to keep their schools running seven months. In 1913-1914 one hundred thirty-seven school corporations applied for aid from this "Deficiency Fund" and nearly \$143,000 was distributed. The other nineteen-twentieths of the state "Tuition Revenue" augmented by the income from the common school fund, the profits from teachers' examinations, and other minor sources is distributed among the counties in proportion to the number of children of school age enumerated. The County Auditors then distribute these funds so that they plus the income from the Congressional funds will put the townships on an equal basis per enumerated child. They may be used only for the payment of teachers' salaries. The local school funds are derived partly from the liquor license fees, and a surplus from the dog taxes, amounting together to about nine hundred thousand dollars a year, but mainly from the several school taxes on property and polls which are levied by

*There are other state taxes for maintaining the Universities and the State Normal School, the schools for defectives and delinquents, and vocational education.

the school trustees. There is a great deal of dissatisfaction with the system of distribution of the state tuition fund, which is a burden on the wealthier counties for the benefit of the poorer ones. In so far as the counties which particularly benefit have undervalued their property in comparison with others this criticism is justified, for the gain is the result of fraud. On the other hand, just the same argument holds as for making the wealthy man pay for the schooling of the laborers' children. Education increases productive capacity and consuming power. The contributions of the richer counties are eventually returned as the poorer sections become better markets for manufactured products and better sources of raw materials or of farm crops. Whether, with our present curriculum, this argument is valid is open to question, but the principle is clear that the per capita distribution of the state money is just if the schools are efficient, and that it is necessary for the education of children in struggling communities.

These current revenues are generally insufficient to meet such emergencies as the construction or repair of a school building or the purchase of land. In such cases, the board of school trustees may, with the authorization of the town board or city council, issue bonds. These bonds are limited in amount by the size of the city or town and by the amount of the taxable property. They are issued at a moderate rate of interest, and provision must be made for their retirement within a reasonable period. The wisdom of borrowing money for the construction and equipment of schools can hardly be questioned, as the investment should be socially productive, and as communities cannot be expected to avail themselves of the privilege of accumulating funds for future construction. The one precaution is that excessive debts should be avoided.

Organization of the School System.

Indiana seems to have been the first state which made the jurisdiction of the school executive coterminous with that of the civil, for outside of incorporated places the educational administrative unit is the township. The Township Trustee has charge of the school system, subject to the general laws of the state, and to the power of the Advisory Board which makes local appropriations and tax levies. He is given an assistant in the person of the School Director,

an unpaid officer elected by the tax payers of a school district who have been listed as parents, guardians, or heads of families, and attached to the district. However, any voter may be attached at any enumeration, and no minor or married woman may vote. This group representing the patrons of a particular school uses the director as a medium of communication with the Township Trustee. It may determine additional branches to be taught, decide the length of the school term, direct necessary repairs, and request relocations of the building. The Director, in addition to presiding at the meetings of the patrons and to keeping records, has immediate charge of the schoolhouse, under the trustee, and is expected to visit it from time to time, having power to expel refractory pupils. Notwithstanding this advisory organization, the township schools are practically under the dominance of the Trustee.

The incorporated towns* and cities entrust their schools to boards of three Trustees elected by the Town Boards and City Councils. The members of the boards of School Trustees take office in turn, beginning the first of each August, and they hold their positions for three years after appointment. This system of choosing the school authorities is designed to remove education from politics by making the election indirect, but the attempt is an utter failure. A very different method has been adopted for Indianapolis, in that the schools of the Metropolis are under five commissioners who are elected for four years at the city election on a special ballot so arranged that the political affiliations of the candidates are not disclosed. Two commissioners are elected at one city election and three others at the next, two years later. Candidates are nominated by petitions signed by not fewer than three hundred householders. Terre Haute has a board of five trustees also elected by the people.

Whether the schools are in the townships or in incorporated places, the Township Trustees and the Boards of School Trustees have many functions. The Trustees have the responsibility of providing, maintaining, and equipping adequate school buildings, and, within the limits fixed by law, they may determine the tax rates of towns and cities for educational purposes. Moreover, they must keep the schools open at least six months, make annual reports to the

*Towns may turn over their schools to the Township Trustee and abolish their own boards of school trustees.

County Superintendent, and provide for an enumeration of all persons of school age within their jurisdiction. The Township Trustees and the chairmen of the town or city boards comprise the County Board of Education which meets semi-annually for the purpose of standardizing maps, libraries, and other equipment. Finally, trustees, except in Indianapolis, may perform the all important task of selecting the teachers.

Once in four years the Township Trustees elect their County Superintendent who must have been actively engaged in school work for at least two years in the last ten and who must hold a three year, sixty month, life, or professional teacher's license. This official has no authority over the schools in the cities having their own superintendents, but outside of their limits he is supposed to be the fatherly friend of the teachers. In exercising a "general supervision" over the schools of the county he is required to visit each township institute at least once a year, and to conduct annually a county institute, to decide disputes under the school laws, appealing if necessary to the State Superintendent for authority, to provide for examinations for graduation from certain town graded high schools and from township, district, or town elementary schools and furnish certificates of graduation, to conduct examinations for teachers' licenses and grant certain of the licenses, to make sure that the proper school funds are turned over to the school authorities, to apportion the state distribution among the townships, to see that certain duties of school trustees are properly performed, and to act as an intermediary between the state and local authorities. In his endeavor to improve the schools and the teachers, the County Superintendent is expected to visit every school while it is in session and offer counsel to the teachers. Finally, he is required to make an annual report to the State Superintendent. Since the law gives the County Superintendent so wide a range of functions, he enjoys almost immeasurable influence, and can greatly benefit the schools, especially if he be alert for the new ideas of which he can learn at the meetings of the state association. On the other hand there have been grave abuses connected with the office. These abuses have been partially corrected by legislation forbidding the incumbent to have any financial interest in school furniture, text books, maps, or other supplies, or from being connected with a

school for fitting persons to pass the teachers' examinations. Moreover, the qualifications for the office are so meager that men of small teaching ability and of little educational information are eligible. The result has frequently been the choice of individuals whose forte was politics rather than education, and whose interest was not primarily professional.

The County Superintendents carry out orders issued by the State Board of Education, whose president is the State Superintendent of Public Instruction. This State Superintendent is elected by the voters of the state as a whole for a term of two years to exercise a general supervision over the graded and the high schools of the state. He is required to give opinions to school officials who need assistance in interpreting the laws, to prepare reports to the Governor, and to the General Assembly, and to recommend plans for improving the school system of the commonwealth. Once during his term the Superintendent is required to visit each county and go over the books so far as they relate to the school moneys, and, in general, he is commissioned to look after the school funds and school property of the entire state system. Finally, he issues many of the teachers' licenses, all in fact that are to be valid thruout the state or for more than three years, except life and eight year professional licenses which are executed by the State Board, and he grades the examinations submitted in such special branches as music, art, manual training, sewing, cooking, kindergartening and physical culture. In the conduct of his office the State Superintendent is aided by an Assistant Superintendent, a State High School Inspector, a Deputy Superintendent in charge of industrial and domestic science education, a State Supervisor of Agricultural Education, a Head of the Manuscript* Department, and others of lower rank.

The State Board of Education is composed of the State Superintendent of Education, the presidents of Indiana and Purdue Universities and of the State Normal School, the superintendents of schools in the three cities having the largest number of school children, three citizens actively engaged in educational work, one of whom must be a county superintendent, and three other persons interested "sympathetically" in vocational education, one of whom must rep-

*Examination.

resent the employers and another the employees. These last six are appointed by the Governor for terms of four years. The State Board adopts rules for enforcing the laws regarding education, supervises the examinations for licenses to teach, exercises a strong influence over the regularly paid state education officials, and considers possible means of bettering the educational system of the state.

The Teachers.

One of the most difficult tasks entrusted largely to the State Board of Education is the protection of the school children from inefficient teaching, by a legally outlined system of licensing. No person may be employed to teach unless he shall have completed the standard high school work, shall have studied at least twelve weeks in a "school maintaining a professional course for the training of teachers" or a year in a recognized college, and shall have obtained a license by passing an examination set by the state board. This permits him to teach during the year. Then, if he has had more training of a professional nature he may secure a two year license, and with increased study and experience he can qualify for licenses for longer periods. The examinations are conducted mainly by the county superintendents, but papers in special branches are graded under the immediate direction of the State Superintendent. The graduates of the State Normal School after successfully teaching for two years are given diplomas which are equivalent to life licenses. The elaborate system of examinations assures a minimum standard that is perhaps tolerable, but by no means commendable, for it is a fact that a good many poor students in high schools succeed in obtaining the licenses after a minimum of required professional work.

As the pupil is in some degree protected by the licensing of teachers, so the teacher is protected by a minimum wage law, for a beginning teacher must be paid a daily rate equal in cents to the product of his highest general average grade on examination times two and a half; after a year of teaching the minimum wage is obtained by multiplying the average of the success grade and the grade obtained in the examination by three, and so on. The success is estimated by the county, town, or city superintendents on grounds of teaching power, discipline, and general characteristics (including personality), and is increased two per cent for at-

tendance at the county institute. Altho it is difficult to measure success on a scale of one hundred, altho personal likes and antipathies often enter into estimates, and altho some superintendents have weird systems of grading, the method has a good deal of merit in places where the authority is able and conscientious. While the minimum wages based on these principles are very low, they are a protection to the dignity of the profession and have materially contributed to its elevation.

After the teacher has qualified and obtained a position the law seeks to prevent deterioration, first by requiring renewals of licenses, and second by enforcing attendance at institutes. At least one Saturday in each month, two at the option of the trustees, must be devoted to township institutes or to model schools for the improvement of the teachers. Attendance at these institutes is enforced by a system whereby a day's wages is forfeited for absence and an additional day's wages is paid for attendance. County Institutes are held for five days during the summer, one hundred dollars being allowed the superintendent for expenses and additional funds being realized from fees. Moreover, attendance at the State Teachers' Association and at the meetings of the lesser organizations is encouraged. While these conferences are not always fruitful of practical suggestions for all who attend them, they are inspirational, and they broaden the horizon of those who are falling into deep ruts.

The poor quality of teaching is so apparent to many that they have joined with the sentimental idolizers of "the American school marm" in an attempt to make the profession more attractive. The wages of school teachers are so low that it is all but impossible for a married man or a single woman to save enough to purchase a comfortable annuity by the time when retirement is imperative, and so educators have long advocated pensions. After several laws had passed permitting various cities to pension their old teachers, the General Assembly of 1915 adopted a general plan. The system is to be financed by the income from a permanent fund that is to consist of such donations and other sums as may be acquired, by assessments on the salaries of the teachers who are included in the scheme, and by as much of an addition as may be needed from the state tuition tax. Any city of at least five thousand inhabitants, any county, or any public state supported school whose

teachers devote their entire time to teaching may constitute a unit; on petition of a majority of the teachers and a majority of the school officials accompanied by the applications of the teachers to become beneficiaries of the act, a unit may benefit from the fund. During the first fifteen years of service the teacher must pay ten dollars a year, during the next ten years twenty dollars per annum, during another decade twenty-five dollars, and for the rest of the teaching period twenty. No payments are to be made after the fortieth year. A teacher who has served thirty-five years, twelve of which may have been in some other state, may retire on an annuity of six hundred dollars, and the allowances increase with the length of service to seven hundred dollars after forty years. If a teacher is disabled permanently or temporarily after twenty-five years of teaching the annuity is three hundred fifty dollars, and the stipend is increased by twenty-five dollars for each additional year of teaching up to five hundred seventy-five dollars at thirty-four years. On becoming beneficiaries of the system, teachers are to pay the arrearages, either in cash or in five annual installments with five per cent compound interest on the deferred payments. The payments of the regular dues are to be deducted from the salaries by the school trustees and paid over to the Retirement Fund. In order that teachers may not hesitate to enter the system because of fear that they may lose their investment on leaving the profession, the law provides that an individual on withdrawing may receive a rebate of his payments minus any disability annuities that he has enjoyed. The accounts of the various units are kept separately, and the amounts required for annuities from the State Tuition Fund are deducted from the shares of the respective units at the semi-annual distributions.

This pension system is not quite perfect as there is no compulsion upon any individual teacher to accept its benefits. Moreover, refunds of payments are made to teachers, or to their heirs if withdrawal or death comes before annuities have been received. Thus the system is not in any sense one of insurance, but is rather a pension granted to those teachers who are willing to deposit a little money without interest. Perhaps this is justified by the fact that most school teachers are so short-sighted that they cannot see the necessity of old age insurance, many a person thinking that some windfall or other will free him from the need

of an annuity. Finally, the foreseeing teachers cannot avail themselves of the pension privilege until they can persuade a majority of the others in their units to apply, or else until they can obtain new positions in organized units.

Above the city teachers are the municipal superintendents. Altho no law dictates their qualifications, they are probably the ablest group of individuals in the entire school system of the state. The superintendents are hired directly by the boards of school trustees, and they in turn are allowed to exercise a large discretion in the selection of the instructors.* On the superintendent more than on any other individual depends the efficiency of a city system, for he must be the intermediary between the board and the teachers. It is his function to raise the schools to the highest standard allowed by the resources of the municipality, to advise the board on matters of routine and of special moment, to coach weak teachers, to look after the physical equipment of the schools, and, in short, to be a general administrator. The city superintendents have an association, which holds spirited and profitable meetings and which has initiated many of the best features of the school laws of Indiana.

When the teaching force of the state is considered as a whole, several thots arise. In the first place, altho the qualifications for licenses are too lenient, and consequently the grade of intellect possessed by many instructors is deplorably inferior, there are many persons of exceptional ability giving their best selves to the children of the commonwealth. Again, the teachers are frequently greatly handicapped by the lack of equipment, and by inadequate rooms, but as time passes the quality of the school plants is continually improving. A third deplorable fact is the low social position conceded to some teachers of the highest ability and of excellent personality by other citizens. These evils are largely due to two things, to low pay and to politics. During the year 1913-1914 the average daily wages of men employed as teachers was \$4.75 in the high schools and \$3.26 in the grade schools, and that of women \$3.93 in the high schools and \$2.99 in the grades. Probably more than half the teachers in each class received less than the mean for

*In Indianapolis the organization of the paid administrative force is more complex.

the group. Such low remuneration* cannot be expected to attract the ablest persons save for short intervals between periods of study or while awaiting business openings, for the pay is hardly sufficient to enable a person to secure the comforts necessary to the wholesome life a teacher should lead, and it is certainly insufficient to afford regular association in more cultured circles of society. The meager compensation coupled with the general feeling that a teacher is a public servant largely accounts for the scant social recognition. But the snobbishness of society is by no means as important a drag upon the teachers as is politics. From the school where "Nobody fails in English" to the other where "Of course this girl deserves no consideration, she is the daughter of a rag-man; but the other must be treated well, for her father keeps a large store" the step is half way across the state, but in some communities it is an open secret that certain pupils pass courses and receive diplomas on the merits of their relatives. Probably the situation in Indiana is not a whit worse than in other states: certainly the conscientious teacher is in many ways hampered.

The Pupils.

In the last decade of the nineteenth century there was taken the final step in breaking away from the old ideas of allowing the parent to provide the education he thought proper. The law compels the attendance at school of all children between the ages of seven and fourteen years, except those certified by the physician to be physically unable to stand the training. If the child is blind or deaf it is to be sent to the state institution for such defectives, otherwise to the regular public schools unless its parents prefer to send it to an institution having a session at least as long as that of the common schools. After the age of fourteen is attained the child may secure permission to work provided it has completed the studies of the fifth grade, but no child may enter industry without a permit until it has passed its sixteenth birthday. Even if work papers have been

*While it is true that the wages of Indiana teachers are low, they are higher than in many commonwealths. For instance, the average monthly pay of women teachers in the United States was \$61.31 in 1913 while Indiana stood ninth with an average of \$69.45. On the other hand, there were twenty-four states that paid higher monthly salaries to men teachers than Indiana, which paid \$74.46—less than the mean for the country as a whole.

secured, a child until its sixteenth birthday must be in school when not employed. This compulsory education law is enforced by truant officers who in the smaller counties are also probation officers. During the first five years of the enforcement of the law over seventy-four per cent of the enumerated children were enrolled in school, while for the last nine years before its enactment the enrollment had been but sixty-eight per cent.* It is estimated, indeed, that the law increased the daily school attendance by over twenty-five thousand.

The law permits the establishment of public kindergartens in incorporated towns and cities of six thousand inhabitants or more and allows the levy of a two cent tax to meet the expenses of these institutions or to aid free public kindergartens. But no part of the state tuition fund may be used for such purposes. However, the school career of the child is generally begun at six in the primary or "elementary schools." The General Assembly has voted that "Orthography, reading, writing, arithmetic, geography, English grammar, physiology, history of the United States, and good behavior, and such other branches of learning and other languages as the advancement of the pupils may require and the trustees from time to time direct" shall be taught in the common schools. The course of study has been outlined with the view of adapting it as well as possible to the different circumstances of country, town, and city schools. Moreover, the course has been adapted to the average pupil and is therefore injurious to the bright child who is not compelled to exert himself to his full capacity. In large cities half-yearly promotions and advanced classes may be introduced to meet the needs of the more intelligent individuals. Furthermore, the course is planned to be very thoro, as there is a good deal of repetition. These studies have been supplemented by some such additions as civics, Indiana history, music and drawing, and the state law of 1913 made obligatory on town, township, and city schools the teaching of elementary agriculture, domestic science, and industrial arts. The instruction in these practical branches has not yet been well standardized, as the supply of teachers equipped for such work is very inadequate. It is to be hoped, however, that the next few

*The enumeration includes children from six to twenty.

years will see a great improvement in the handling of these vital subjects as the instructors are trained and as equipment is accumulated.

In the cities it has been possible to raise the elementary schools to a high degree of efficiency, but the one or two room country schools have not been able to keep pace with the ever rising standards. Consolidation, the remedy for this situation advocated by Caleb Mills in 1849, has now been widely adopted as the result of a number of laws. In 1899 the township trustee was authorized to provide transportation for every child living more than two miles from the nearest public school; and two years later he was required to close every district school having an attendance less than twelve, and to pay for the transportation of the pupils thus discommoded, and he was permitted to close schools having fewer than fifteen students. Today the law requires the transportation at public expense of children between six and twelve years of age who live more than a mile from the school, and of all children residing more than two miles away. The law also permits the combining of the schools within townships, or of two or more townships. These legal provisions have made possible the great movement for the consolidation of the schools that has recently taken place. During the school year 1913-1914 there were fifty-nine of the Indiana counties having from one to sixteen consolidated elementary schools apiece and a total of two hundred ninety such buildings, as contrasted with forty-six counties and one hundred sixty houses five years previous. In 1914 the total number of counties having consolidated schools of any type was seventy, an increase of twelve in five years, and the total number of consolidated schools was 665, a gain of 239. At the latter date over twenty-six thousand children were transported to their classes.

It has been asserted that two of the strongest arguments for consolidation are fallacious: the larger schools are not always conducted at less expense than the numerous district schools, and the attendance in the lower grades has not universally been improved. On the other hand there are distinct gains in consolidation. The large schools can have better paid teachers who may specialize either in grades or in subjects, can purchase more adequate equipment, and can receive pupils for a longer term each year. With centralization the course and the grading may be so

arranged that the pupils can use their time to best advantage. Aside from the purely pedagogical merits of consolidation there are other points to be considered. First, the larger school house can be built in a sanitary way, and the health of the children can be well protected. Moreover, with larger numbers of pupils there is possible a genuine solidarity in the school, class contests, school loyalty, and keen competition in all lines of activity. Finally, the consolidated school offers a social center for an enlarged community. With all these advantages it is no wonder that the consolidated school is rapidly gaining favor. It has, however, one great drawback, for the transportation of the children frequently entails their riding in cold but poorly ventilated wagons for as much as two hours in the morning and two at night. Thus in the winter months they have to leave home before it is light, and return after dark. The ride seriously cuts into the play time, and makes impossible much work about the home either at chores or lessons. Because of its many good features the consolidated school has been permanently established, but the time must be hastened when the children will be carried from their homes and back in swift automobiles, rather than in the slow transfer wagons. As the roads in the backward communities are improved the movement toward consolidation will probably be intensified.

If all children finished the complete course there ought to be about three students in the high schools for every seven in the elementary. As a matter of fact the ratio is not quite one to six, and the high school graduates number about one-third the graduates of the grades. Probably because the children of the more influential families attend them, the high schools have attracted attention out of proportion to the number they serve. The high schools are divided into three classes. In 1915 there were about five hundred "commissioned high schools," schools having sanitary buildings affording room for their pupils; well selected and growing libraries; laboratories properly equipped for the science work undertaken in the school; good teaching by at least two persons, of whom one must be a college graduate, who give their entire time to the high school work; an eight month year and a thirty-two month course including the subjects legally necessary; work in music, drawing, agricultural or industrial training, and domestic science; com-

plete records of the work of each student; and three years work in language for students preparing for college entrance. About one hundred sixty high schools fell into the "certified" class which must meet the same requirements as the commissioned schools, except for the three years course in a language for college entrance and for the fact that the school year need not exceed seven months and the complete course twenty-eight months. A small number of high schools, thirty-five, are styled "accredited," which means that their courses for one, two, or three years are recognized as the equivalent of similar work in commissioned high schools. Every child in the state is legally entitled to a high school course, and if his town cannot give it to him, it is the duty of the trustee to grant him a "transfer," the right to study or enroll in another corporation. The General Assembly requires every commissioned high school to teach commercial arithmetic, algebra, geometry; United States, ancient, medieval, or modern history; commercial or physical geography; English composition and rhetoric; American and English literature; German or Latin; biology, physics, or chemistry; civil government; drawing; domestic science; and agriculture or industrial work.

The course of study for the high schools has been developed just as carefully as that for the grades, and is on the whole adapted to fit the child for a really intelligent life after commencement. Doubtless it would be better to require four years of English instead of three, as many of the pupils least able to handle the vernacular refuse to elect it in their senior year; and it would be wise to substitute French or Spanish for Latin. But the weakness of the high schools does not lie in their course of study as much as in their overworked teachers. The experience of college instructors with high school graduates furnishes abundant evidence that the children are not made to do thoro work and are not trained to reason accurately.

For the high schools and the grades, the state has prescribed a series of text books. The system of "state adoption" provides the children with their texts at a low price, compels the use of a fairly good book in every community, assures children against loss of time when they are transferred from one school to another within the commonwealth, prevents the corruption of trustees, and requires a periodic reconsideration of the merits of various works by

a group of the leading educators. On the other hand there are certain drawbacks, for the teacher of ability and originality is hampered by the restrictions, and the more progressive communities are prevented from taking immediate advantage of new books, or from adopting texts superior to those selected by the state authorities.

Another aspect of this question must not be neglected, for the Indiana State Federation of Labor has been insisting that the text books should be furnished free. Today pauper children are thus helped by the township trustees, but the receipt of such aid is a mark of poverty. The free book system would make it somewhat cheaper for many of the poorer families to send their children to school without the resort to charity. Finally, the state ownership plan should prove to be more economical socially than individual purchase, not so much that a lower price could be obtained as that the books could be used more times. One old objection to the free textbook has been dispelled by recent studies of the endurance of microorganisms in library volumes, and the comforting conclusion that practically all germs on the pages of a book are killed or devitalized within three months. Probably the greatest objection to free texts is the possibility of aversion to change if each town had an investment in books. This could be obviated partially by adoptions for a period equal to the average life of a volume, and by so arranging adoptions in classes that the terms of several books would expire each year.

Vocational Education.

The General Assembly of 1913 made a modification of the curriculum which may eventually work an educational revolution. The act required that elementary agriculture be taught in the grades of all town and township schools, that elementary industrial work should be taught in the grades of all the city and town schools and that elementary domestic science be taught in the grades of all township, town, and city schools. The courses were to be outlined by the state board of education which was augmented by "three persons actively interested in, and of known sympathy with, vocational education." Two new state officers were to be appointed by the State Superintendent, one to have charge of the industrial and domestic science training and the other of agricultural education.

In addition to this compulsory vocational education the school corporations are authorized to establish vocational schools or departments for vocational education, and to finance these, if necessary, with a special ten cent tax. These vocational schools and departments may offer day, part time, and evening instruction of less than college grade, but "designed to meet the vocational needs of persons over fourteen years of age who are able to profit by the instruction offered." The day and part time classes are to be open to none over twenty-five years old, and the evening work to none under seventeen. Except for women taking domestic science the evening and part time classes, moreover, are available only to those who are studying the same work they do for wages. In case such vocational schools have been established and approved by the state board of education, the local school authorities may require attendance of all youths between fourteen and sixteen years of age who are engaged in any regular employment for five hours or more per week between the hours of eight A. M. and five P. M. In other words, children under sixteen who have been given their work papers may be compelled to attend continuation schools during working time for not less than five hours a week. School corporations maintaining vocational schools and departments approved by the state board of education are to be reimbursed from state funds to the extent of two-thirds of the teachers' salaries. The money for this state aid comes from an additional one cent tax. Under this law fifteen cities organized vocational departments in 1914-1915 with a total enrollment of 4,020 of whom 1,197 were men.

As there seem to be no recognized standards for judging this law, it may be well to indicate a few cardinal principles. There are numberless variations of vocational education. These fall mostly into three types. In the first place, vocational education may be designed merely to improve the manual efficiency of the pupil at his present position. This kind of teaching helps the individual to surpass his fellows and to earn higher wages by superior speed or skill. If such training is very widespread it cannot much raise wages, for it will intensify the competition for places; and since the same amount of work could be done by fewer persons some workers would be displaced and compelled to seek new employments. Such training would

be of great benefit to the manufacturers, however, in giving them highly skilled workers without entailing on them the cost of apprenticeships. This would be especially true if a whole state should adopt universal training in manual technique in advance of other commonwealths. The employers in the first state would have a considerable differential advantage. On the side of the workers, however, little can be said for this grade of vocational work.

A second type of vocational training aims to impart together with the skill of the task an understanding of its theories, and of the relations of the processes in the entire industry. Such instruction would probably result in the worker having greater respect for his occupation and increased interest, and at the same time prepare him for advancement to higher positions in the same general field. The manufacturer would be benefited by even more efficient service than that created by the first type of training provided he had occupations that could utilize judgment and broad knowledge; on the other hand he would have a more intelligent labor force, better able to insist on high wages and regular employment. About the same results would follow a third type of vocational training, namely that designed to give the worker who is already master of the manual technique, the theory of the operations and of the industry.

It appears that if any of these three types of industrial training should be adopted by a whole nation, the efficiency of the workers would be greatly heightened, the employers would have better opportunity for competition with foreign producers, and the increased sales would tend slightly to enlarge the labor market. On the other hand, the universality of trade knowledge would bring with it so large a supply of skill that its value would decrease considerably. Thus the wages of those who now have a monopoly of skill would tend to fall. But even if industrial training were world wide there would be some gain to the workers, for with increased skill, the costs of production would be reduced, and with the same amount of labor more goods, more things destined to create human well-being, could be made: so prices would tend to fall, and wages would purchase more. If this analysis be sound, it follows that there is a distinct advantage to be gained by both the employers and the workers in a state which early undertakes universal train-

ing, for it can produce at a relative advantage, an advantage which is lost when the other states follow the lead. It may, then, be concluded that any one of these forms of industrial education, if widespread, will accomplish net social good, probably at the expense of the privileged workers who now possess a trade skill.

Much more emphatically can agricultural education be endorsed. Here the problem is not one of helping the employee to raise his wages, so much as it is the training of the future owner of a business to realize profit from his plant. The skilled agriculturalist, even tho he has no capital can become a manager or a tenant, can be virtually his own employer. From increased agricultural training, therefore, one is to expect better crops, larger profits for the farmers who raise them, and more for human kind to eat.

In view of these considerations the wise course for Indiana to pursue is quite clear. It is impossible for the schools to impart too thoro a knowledge of the fundamental principles of farm management, provided they do not sacrifice the academic subjects necessary to make good citizens having a fair knowledge of their country and its culture. As the large majority of the school girls will become housewives, there is little fear that over-emphasis can be put upon cooking, sewing, housekeeping, artistic furnishing, food values, physiology, hygiene, and other branches of domestic science. For the city boys and girls who are probably destined to enter industry, the first step is to build up that general control of hands and brain that will enable the individual to master readily the technique of a special trade, and then to offer a differentiated skill without neglecting the theory of the whole industry. The cry of the present comes from the masses in "blind alley jobs" which lead to no promotion. By thoro trade training children can be saved from these occupations. By night schools and continuation schools those now in the dark pockets of industry can be lifted out. The requirement of the present law that a vocational or trade school, to receive aid, must confine its work to individuals studying the craft at which they are already employed, defeats one of the great purposes of industrial training. The law must be amended and then extended. The more rapidly and the more thoroly vocational education is developed in Indiana, the more prosperity will her employers and her employees enjoy.

Health.

Not only is the course of study standardized, but the school buildings must be such as to preserve the health of the children. The "Sanitary Schoolhouse Law" which has accomplished a great deal of good, protects the pupils from too much noise, from damp walks, from cold or stuffy rooms, from poor light, from impure drinking water, and from inadequate toilet facilities. Moreover, the school authorities are permitted to appoint school physicians who are commissioned to test the sight and hearing of the children, to inspect their teeth, and to look for disease and other disabilities that would prevent the maximum benefit from study. Any diseases or defects discovered are to be reported to the parents or other responsible persons, and if they cannot provide the proper care, attention is to be furnished through public dispensaries or by the aid of the trustees. The expenditure for medical inspection is probably one of the most profitable investments of the public school funds, for it is a great loss to the community to have in the class room a child unfit to do the work. Such an individual handicaps the instructor in many ways, he drags down the standards of his fellow pupils and loses his own opportunities. The discovery of the need of glasses, or the putting of a deaf child in a front seat in order that he can hear, may result in giving the community a useful man rather than a reprobate. As teachers may refer ailing children to the physician, his services may prevent epidemics. Thus medical inspection is a form of insurance of society against the spread of disease and against waste of talent. It may be hoped that in the near future medical inspection will be universally adopted.

In many other ways does the state care for its exceptional children. There is a state school for the deaf founded in 1843, and another for the blind opened four years later. Cities of not less than three thousand inhabitants may conduct night schools if as many as twenty employed persons between the ages of fourteen and thirty desire such instruction. Children who can be better educated away from their home towns may be transferred to other schools. Thus the country children may attend good high schools, and individuals can take advantage of the industrial training in

other cities. And finally, special schools may be organized for colored children.

Gary.

There are many features of the educational system of Indiana that are well known and deservedly commended, but perhaps the most prominent in the public eye today is the system worked out by Wm. A. Wirt in Gary. In 1906 when Mr. Wirt, at the age of thirty-two, first appeared in Gary he had a unique opportunity, for he entered a city built about an enormous manufacturing plant, with the certainty of rapid growth in population and industry. This assured an increasing base for taxation. Moreover, as there was but one important school building and new ones would certainly be needed soon, he would be able to make these conform to the needs of his system. And finally, he had no local traditions to contend with and no antiquated teachers whom for reasons of humanity he could not discharge. On the other hand, Mr. Wirt had some unusual difficulties, for he had a very rapidly growing population to provide for, and the increase in taxes lags nearly two years behind increased values.

The theory of the Gary School system is borrowed from modern industry. The plant must be used to its full capacity every possible moment. Therefore the school day continues from eight thirty in the morning to five o'clock in the afternoon. This statement means more than it seems to imply, for the classes are held even during the noon hour, the pupils being sent home for lunch in two groups. In the evening from seven to nine-thirty the buildings are opened for the adults to enjoy entertainments or to pursue study courses. On Saturdays the children come for voluntary work, and on Sunday the public hears concerts and lectures. The idea is that ultimately the buildings can be used all summer for regular work on the quarter system, and that the capacity will thus be increased one-third again, for each pupil will choose one quarter a year for his vacation, or else he may accomplish four years work in each three. By means of the long school day, coupled with an ingenious program which gives the typical pupil daily about two hours of academic recitations, two of manual training, science, drawing and music, two of physical culture and play, and one of general culture in the auditorium, each

building accommodates about twice as many pupils as it could with the ordinary program. Finally, the school is used to house a branch of the free public library, thus reducing the mean cost of circulating books an average of ninety-five per cent.

The other great feature of the Gary system is its appeal to the pupil. An attempt is made to correlate the work to a degree little dreamed of in ordinary schools. English and spelling are learned in the writing of recipes, the study of history is begun in the *Independent*, the *Outlook*, and the *Literary Digest*, and even the games are planned to involve arithmetical problems similar to those being taught in the class room. The manual training is vitalized, because real things are done. A city chemist as a teacher may let his pupils test milk, and trade unionists in charge of the various phases of physical maintenance have the boys in their vocational classes decorate and paint the buildings, construct the furniture needed, run the heating and ventilating systems, install electric motors, wires, and bells, and print the rather extensive literature of the school system. Thus, vocational work beyond the resources of an ordinary city can be carried on at a net profit. This kind of instruction interests the pupil intensely, and, combined with the fact that all the work from the kindergarten thru the high school is conducted in one building, helps to keep him from dropping out of school.

The unusual case can be well cared for in Gary, for the classes are so organized that a pupil may be promoted in each subject just as rapidly as he can progress, while he may be compelled to repeat those subjects in which he fails. This is possible because the teachers specialize, and the children can go from one instructor to another, instead of reciting all their lessons in one room to one person. The departmental method for grade work has the merit of giving continuity of teachers in each subject, combined with broadening contact with several instructors. The teachers, furthermore, can be real specialists. Another important exceptional case is the sickly child; such individuals may be sent to the Gary schools to be made well, for the play and physical training are designed for body building.

This system of schools has won the confidence of the people of the city because of its efficiency in educating the children. It is also economical, for, in spite of the excel-

lence of the buildings and the equipment, both the initial per capita cost of the plant and the cost of maintenance, lessened by the vocational education, are low. High salaried instructors are so advantageously used that even the cost of instruction is less than in schools as usually run. With all its good features, the Gary school system, reaching more adults than children, is something of which Indiana can justly be proud.

Normal Schools and Libraries.

In another important group of educational agencies are the normal schools. Best and largest of these is the State Normal School at Terre Haute which has beautiful buildings, numerous departments, and a variety of courses planned to afford the best possible training for teachers of all grades and branches taught in the common schools. This school and two city normal schools reach three thousand young people each year. The work of the public institutions is supplemented by the courses in education in many of the standard colleges, and also by the six private enterprises which in 1913 had a total enrollment of nearly three thousand future teachers.

No summary of the educational work in the state would be complete without mention of the private schools of various sorts. In addition to the parochial schools, there are business colleges galore, and Young Men's and Young Women's Christian Association night schools.

The people as a whole may be reached thru libraries, which may be organized by cities, towns, and townships, while some of the schools also extend reading privileges to the public. Altogether in 1914 there were three hundred sixty-two city and town libraries and eleven school libraries freely open to the public. In addition to these, which served about ten per cent of the townships in the commonwealth, there were three hundred and sixty-one traveling library stations with over twenty-five thousand members. The state has a Library Commission that aids the work in many ways, such as offering advice concerning the selection of books and the interpretation of the laws, conducting a summer school for librarians, distributing pamphlets, circulating art exhibits, arranging lectures, and in other ways promoting the interests and services of the libraries.

Higher Education.

Above the common school system of Indiana are the higher institutions of learning. Among these Vincennes University seems to be the oldest college west of the Alleghanies, for it was incorporated by the Territorial Government in 1807 and opened three years later on the profits of a lottery and of the sale of lands donated by Congress. Altho founded so early, Vincennes University has not developed as have some of its rivals, for its work seems to be mainly of the normal, business, and preparatory type. In 1824 a seminary was opened at Bloomington which became Indiana College in 1828 and Indiana University ten years later. This institution was financed at first on the proceeds of the lands given by the United States Government, later by gifts from the state, and it is now supported by two-fifths of a special seven cent tax levied for the three state schools by the legislature, on all the taxable property in the commonwealth. Indiana University has expanded until it now includes beside the College of Liberal Arts special schools for graduate work, education, law, and medicine. The work of the institution is carried directly to the people by correspondence courses, circulating library packets, clubs, lectures, conferences, and the public welfare service. With a rapidly increasing student body, this university has proven itself worthy the place it occupies at the head of the state school system. The other state university, Purdue, was founded as a result of the grants of land script by Congress in 1862 and 1864. It, too, has grown in influence, because of its work for agriculture, which was described in Chapter III, and because of the high grade of the technical training it offers.

The seminary and college at Bloomington were long under the control of the Presbyterians, and in fact the denominations seem to have been the founders of all the early institutions that endeavored to supply advanced education. A number of these came in quick succession as each church organization felt the need of academic opportunities for its young men, more particularly for those that desired to enter the ministry. The Presbyterians opened Hanover and Wabash in 1827 and 1833; Franklin, the Baptist college, and DePauw, the Methodist university started their work in 1837; Notre Dame in 1844 began its career as one of the

foremost Roman Catholic universities; in 1847 Earlham afforded the Friends of the state a school that soon became a college; and Butler did the same for the Christians in 1855. This enumeration does not include all of the denominational colleges now in existence, for the Methodists have Taylor and Moore's Hill, the Roman Catholics maintain St. Mary's, St. Meinrad's, and St. Joseph's, the Mennonites support Goshen, the Lutherans control Concordia, and the United Brethren subsidize Manchester. There are others that are not mentioned by the Commissioner of Education as Universities or Colleges, but which consider themselves worthy that designation. In Rose Polytechnic Institute, Indiana has one of the best engineering schools in the country. Valparaiso University bestows the bachelor's degree, but it is hardly a university in the usual sense of the term, as its work is mostly of secondary grade. This is a peculiar institution, in that it has been financially profitable to its owners and founders. The secret of its success seems to lie in the fact that it offers very practical courses at a low cost in both time and money. It gathers students from every quarter of the globe, and does help them to make better livings.

A study of the catalogs of the colleges of Indiana and of the statistics presented in the report of the United States Commissioner of Education, impresses the fact that the state contains a great many institutions founded and maintained by self-sacrificing men to furnish education under moral surroundings to the young men and women of a particular denomination. Before the experimental sciences had become fairly exact, before sociology, economics, and politics had grown beyond the stage of *appriori* reasoning to correlations of mass phenomena, and before experimental psychology appeared, a good man and a log might serve for a college during the summertime. Today, however, there is needed a good deal of equipment for any tolerable teaching of chemistry, physics, biology, geology, and psychology; good libraries are essential to work in the social sciences as well as in the languages, literatures, and philosophies; and, what is just as important, only specialists can be profitably employed to impart information of high grade. It is probably not beyond the facts to assert that several small self-styled colleges and universities are playing a sort of educational bunco game. It lies with the state to prevent this by

drastic measures. The exact requirements to be enforced on corporations entitled to confer the bachelor's degree can hardly be set forth here; but it might be suggested that, after a fair period of grace, charters or at least exemption from taxation should be withdrawn from such institutions unless the ratio of faculty to students was greater than one to twenty, unless sixty per cent of the faculty held doctor's degrees earned by work in the larger universities of the country, or had distinguished themselves for scholarship, unless thirty per cent of the teaching force were given salaries of at least two thousand dollars a year, and another thirty per cent salaries of at least fifteen hundred dollars, while no instructor giving full time to work for the college was paid less than a thousand dollars. Moreover, every college and university should compel each person ranking above the grade technically described as instructor, to spend at least one year in seven in study either at home or abroad, for no professor is able to keep up with a science or literature unless he has considerable time for such uninterrupted study.

Drastic as these proposals seem they have a sound basis. An institution which cannot pay salaries sufficient to secure high grade men for its teaching force, has no more right to offer instruction than a man who cannot pass examinations in materia medica has to practice medicine. A college that does not force its professors to pause, rest, think, and learn the new facts in their fields, is negligent of its duties. Colleges would have the choice of meeting the requirements set or of following the glorious path of the private academies which were useful before the development of the efficient public high school but which have now generally passed away. The small struggling college could combine with others of the same class to form one strong institution; or sects might be allowed to make arrangements with the state university, or with the other larger schools to have courses given by professors satisfactory to the particular denomination, and setting forth its peculiar tenets. Pastors for the students might be maintained by all denominations. It should never be forgotten that the college exists not for the sake of employing certain men as teachers, nor even for the sake of the individuals in the student body, but rather in order that, thru the increased

efficiency and broadened vision of those students, the whole state and nation may benefit.

It must not be gathered that the system of higher education in Indiana deserves severe criticism when contrasted with that of other states. The truth is that the Hoosiers are well-nigh free from the affliction that results from a surfeit of struggling colleges, and that some of the older denominational schools are able to maintain standards of scholarship equal to any in the country, while the Universities, Indiana, Purdue, Notre Dame, and DePauw, give the best instruction in wider fields. On the whole, the state should be very proud of the work of its highest schools.

Summary.

Altho a great deal can be said in the way of adverse criticism of the educational system of Indiana, there is a steady improvement in the situation. The libraries are constantly reaching larger groups of people; the universities are growing and extending their work to meet the public needs, and at the same time they are increasing their efficiency in what they do. The schools are frequent sufferers from the effects of politics, but it is apparently impossible to remove them from these influences without a return to sectarian education on a basis so narrow that instruction would be confined to a few. The course of study for the common schools has been well worked out, and is being improved by the beginnings of vocational training. Teachers' salaries are too small to attract really first-class men, but, especially in the case of women, they are higher than those in many other states. It can be safely ventured that, comparatively, Indiana ranks among the dozen best states in respect to education, and that, absolutely, her system is improving.

Appendix

Appendix

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